PAINT PRODUCTS

-Enamel
-Latex
-Lacquer
-Paint Brush Cleaner
-Paint Remover
-Paint Thinner
-Turpentine

Hazard Description:

Paints contain resins, solvents and/or petroleum distillates that can cause skin and respiratory tract irritation. They can be harmful if ingested. Most paints are flammable or combustible.

Paints used to produce a glossy and durable finish on wood and metal products may contain glycol ethers. Exposure to glycol ethers can cause nerve, bone marrow, reproductive organ damage, reduced fertility, and birth defects.

Spray painting, even with "airless" spray equipment, generates paint mists and vapors. Spray paint equipment operators should wear a respirator.

When using solvents and paints, good ventilation should be established and maintained. Ventilation should continue while paint is drying and curing.

Proper storage of paints and painting supplies must follow established safety procedures to assure a safe work environment and to prevent accidents.

Paint removers may contain acetone, toluene, petroleum distillates, methanol and methylene chloride, all of which can be damaging to skin tissue. Toluene, methanol and methylene chloride are strong central nervous system depressants and should not be inhaled. When using paint removers, work outdoors, if possible. If not, provide plenty of ventilation.

Turpentine is a common solvent found in workshops and storage areas, and is used for thinning oil, based paints, cleaning paint brushes, removing paint stains, and dissolving some adhesives or sealants. Turpentine poses a fire hazard. In addition, it is a skin and mucous membrane irritant and can cause serious irritation of the kidneys.

Paint vapors may have a narcotic effect, dulling the senses, including your sense of smell. Overexposure could result in stupor, coma or convulsions.

PAINT PRODUCTS - CONTINUED

When using portable containers to transport or store flammable liquids, check to see that spark-arrestors are in place. When dispensing or using these flammable liquids, be aware of the location of fire exinguishers and fire alarm and evacuation procedures. Do not store, use or dispense near arc welding or open flame. Use the bonding clamp to bond and ground containers when dispensing flammable liquids.

Never use paints in confined spaces unless adequate provisions have been made for ventilation or respiratory protection.

Protect yourself from these chemicals by reading the labels and following the recommended precautions. Wear gloves and eye protection, and avoid inhaling the vapors and mists. Wash your hands and face thoroughly before eating, drinking or smoking.

Specific emergency procedures are detailed on the MSDS. In general, if a paint or associated chemical gets into an eye, flush the affected eye with clean running water for at least 15 minutes, then seek medical attention. If it gets on your skin, clean the area of contact.

Because of the variety of painting materials in use, there are many signs and symptoms of overexposure. Read the MSDS for the particular product you are using.

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SAFETY DATA SHEET

SDS FORM 1: COATINGS WITH NO REPORTABLE HAZARDOUS INGREDIENTS

The following Safety Data Sheet (SDS) is being provided pursuant to requirements of the Fed/OSHA (29 CFR 1910.1200) and Cal/OSHA (8 CCR 5194) Hazard Communication Standards. The health and hazards information given here is based on data believed to be accurate by Dunn-Edwards Corporation; we do not, however, assume any liability for the accuracy or completeness of this information. We neither suggest nor guarantee that any hazards mentioned are the only ones that may exist. All persons intending to rely on any recommendation, or to use any technique, equipment, or material mentioned should first satisfy themselves that they can meet all applicable safety and health standards.

The following SDS supersedes any previously issued SDS for each product covered. The reader is advised to destroy any obsolete SDS and refer only to this SDS. As permitted by OSHA, each SDS may apply to a class of products which have similar hazards and contents.

Products covered by this SDS are listed below:

ACBL10-0: ACRI-BUILD Flat
ACHS10-0: ACRI-HUES Flat
ACHS30-0: ACRI-HUES Eggshell
ACHS50-0: ACRI-HUES Semi-Gloss
ACWC10-0: ACRI-WALL Flat Concentrate
ACWL10-0: ACRI-WALL Flat Ready-To-Use
ACWL30-0: ACRI-WALL Eggshell
ACWL50-0: ACRI-WALL Semi-Gloss
AQUA10-0: AQUAFALL Flat
AQUA30-0: AQUAFALL Eggshell
AQUA40-0: AQUAFALL Low Sheen
ASHL30-0: ARISTOSHIELD Eggshell
ASHL50-0: ARISTOSHIELD Semi-Gloss
ASHL70-0: ARISTOSHIELD High Gloss
AWLL50-0: ARISTOWALL Semi-Gloss
AWLL60-0: ARISTOWALL Gloss
BIPR00-1: BLOCK-IT Premium
BRPR00-2-RO: BLOC-RUST Premium, Red Oxide
BRPR00-2-WH: BLOC-RUST Premium, White
DURA50-0: DURAFLO Semi-Gloss
DURA50-1: DURAFLO Semi-Gloss
DURA60-0: DURAFLO Gloss
DURA60-1: DURAFLO Gloss
EDLV10-0: ENDURALASTIC 5 Elastomeric Flat
EDLX10-0: ENDURALASTIC 10 Elastomeric Flat
ESPR00-1: EFF-STOP Premium
ESSL00-0: EFF-STOP Select
EVER10-0: EVEREST Flat
EVER20-0: EVEREST Velvet
EVER30-0: EVEREST Eggshell
EVER50-0: EVEREST Semi-Gloss
EVSH10-2: EVERSHIELD Flat
EVSH20-2: EVERSHIELD Velvet
EVSH30-2: EVERSHIELD Eggshell
EVSH40-2: EVERSHIELD Low-Sheen
EVSH50-2: EVERSHIELD Semi-Gloss
EVSH60-2: EVERSHIELD Gloss
EZPR00-1: EZ-PRIME Premium
FPSL00-1: FLEX-PRIME Select
FTXS10-0: FLEX-TEX Smooth
IKPR00-1: INTER-KOTE Premium Zero VOC
PMCE10-0: CONTRACTOR'S EDGE Flat
PMCE30-0: CONTRACTOR'S EDGE Eggshell
PMCE50-0: CONTRACTOR'S EDGE Semi-Gloss
QKWL10-0: QUIK-WALL Flat
SBPR00-0: Smooth BLOCFIL Premium
SBSL00-1: Smooth BLOCFIL Select
SFSL00-1: SURFACO Select
SPMA10-1: SUPREMA Flat
SPMA20-1: SUPREMA Velvet
SPMA30-0: SUPREMA Eggshell
SPMA40-0: SUPREMA Low Sheen
SPMA50-0: SUPREMA Semi-Gloss
SSHL10-0: SPARTASHIELD Flat
SSHL20-0: SPARTASHIELD Velvet
SSHL30-0: SPARTASHIELD Eggshell

continued

SDS FORM 1: COATINGS WITH NO REPORTABLE HAZARDOUS INGREDIENTS *continued*

SSHL40-0: SPARTASHIELD Low Sheen
SSHL50-0: SPARTASHIELD Semi-Gloss
SSHL60-0: SPARTASHIELD Gloss
SSHV10-0: SPARTASHIELD VA Flat
SWLL10-0: SPARTAWALL Flat
SWLL20-0: SPARTAWALL Velvet
SWLL30-0: SPARTAWALL Eggshell
SWLL40-0: SPARTAWALL Low Sheen
SWLL50-0: SPARTAWALL Semi-Gloss
SWLR10-0: SUPER-WALL Flat Ready-To-Use
SZRO10-0: SPARTAZERO Flat
SZRO20-0: SPARTAZERO Velvet
SZRO30-0: SPARTAZERO Eggshell
SZRO40-0: SPARTAZERO Low Sheen
SZRO50-0: SPARTAZERO Semi-Gloss
UGPR00-1: ULTRA-GRIP Premium
UGSL00-1: ULTRA-GRIP Select Zero VOC
ULDM00-0-GR: ULTRASHIELD DTM Gray Primer
ULDM50-0: ULTRASHIELD DTM Semi-Gloss Paint
ULGM00-0: ULTRASHIELD Galvanized Metal Primer
ULMS00-0: ULTRASHIELD Multi-Surface Primer
ULSB00-0: ULTRA-SCRUB Flat
ULSH40-0: ULTRASHIELD Low Sheen Paint
ULSH60-0: ULTRASHIELD Gloss Paint
VNPL00-0: VINYLASTIC Plus
VNPR00-1: VINLYLASTIC Premium Ultra-Low VOC
VNSL00-1: VINYLASTIC Select Zero VOC
W 350: Interior W/B Acrylic Clear Finish
W 360V: ENDURASEAL
W 370: ENDURALWALL
W 615: ACOUSTIKOTE
W 2456V: Latex Roof Coating
W 5361: Athletic Field Striping Paint
W 6139: Acrylic Elastomeric Coating AZ
W 6160E: VERSAGLO
W 6220E: VERSAGLOSS
W 6230E: VERSAWALL
W 6240: VERSAFLAT
W 6250E: VERSASATIN

SAFETY DATA SHEET

FORM 1: COATINGS WITH NO REPORTABLE HAZARDOUS INGREDIENTS **SDS DATE:** 03/01/2016

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT IDENTIFICATION:
SEE COVER PAGE FOR LIST OF PRODUCTS COVERED

PRODUCT TYPE: WATERBORNE PAINT
RECOMMENDED USE: ARCHITECTURAL COATING

HMIS CODES:	H	F	R	PP
	0	0	0	E

MANUFACTURER: DUNN-EDWARDS CORPORATION
4885 EAST 52ND PLACE
LOS ANGELES, CA 90058-5507

EMERGENCY PHONE: 1-800-222-1222
OTHER CALLS: (323) 826-2663
FAX NUMBER: (323) 826-2653

Dunn Edwards PAINTS

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SECTION 2: HAZARDS IDENTIFICATION

GHS CLASSIFICATION: (NOT APPLICABLE)

GHS LABEL ELEMENTS: [NOTE: THIS CONSUMER PRODUCT IS EXEMPT FROM OSHA GHS-HCS LABELING REQUIREMENTS.]

SIGNAL WORD: (NONE REQUIRED) HAZARD STATEMENT: (NONE REQUIRED)

PICTOGRAM: (NONE REQUIRED)

PRECAUTIONARY STATEMENTS:

PREVENTION: DO NOT INGEST. USE ONLY WITH ADEQUATE VENTILATION OR PROTECTION. AVOID BREATHING SPRAY MIST. AVOID CONTACT WITH EYES AND SKIN. CLOSE CONTAINER AFTER USE. KEEP OUT OF REACH OF CHILDREN.

RESPONSE: CLEAN UP SPILLS WITH INERT ABSORBENT MATERIAL, SUCH AS CLAY GRANULES, PAPER OR CLOTH WIPES. ALLOW TO DRY BEFORE DISPOSAL.

STORAGE & DISPOSAL: KEEP ABOVE 40ºF AT ALL TIMES. DISPOSE OF CONTAINER AND CONTENTS IN ACCORDANCE WITH APPLICABLE LOCAL, STATE AND FEDERAL REGULATIONS.

HAZARDS NOT OTHERWISE CLASSIFIED: NONE.

SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS

HAZARDOUS INGREDIENTS:

CHEMICAL NAME	COMMON NAME / SYNONYMS	CAS NUMBER	CONCENTRATION (%WT)

NO REPORTABLE HAZARDOUS INGREDIENTS.

NOTE: POTENTIAL UNUSUAL ALLERGIC SENSITIVITY TO TRACE INGREDIENTS OF THIS PRODUCT CAN BE MINIMIZED BY FOLLOWING RECOMMENDED PROCEDURES FOR SAFE HANDLING, STORAGE, DISPOSAL, AND USE.

SECTION 4: FIRST-AID MEASURES

EYES:	FLUSH EYES WITH FRESH WATER FOR AT LEAST 15 MINUTES.
SKIN:	WASH THOROUGHLY WITH SOAP AND WATER.
INGESTION:	HAVE VICTIM DRINK ENOUGH FRESH WATER TO ENSURE DILUTION.
INHALATION:	MOVE VICTIM TO FRESH AIR.
MOST IMPORTANT SYMPTOMS AND EFFECTS:	MAY CAUSE MILD IRRITATION TO EYES AND SKIN, GASTROINTESTINAL AND RESPIRATORY TRACTS. SLIGHT DIZZINESS, NAUSEA AND HEADACHE POSSIBLE.
NOTES TO FIRST AID PROVIDERS:	CALL FOR MEDICAL ASSISTANCE IF SYMPTOMS PERSIST.

SECTION 5: FIRE-FIGHTING MEASURES

SUITABLE EXTINGUISHING MEDIA:	FOAM, ALCOHOL FOAM, CO2, DRY CHEMICAL, WATER FOG.
UNUSUAL FIRE AND EXPLOSION HAZARDS:	LIQUID MATERIAL IS NON-COMBUSTIBLE, BUT DRIED FILMS ARE CAPABLE OF SUPPORTING COMBUSTION WHEN IN CONTACT WITH OPEN FLAMES. CLOSED CONTAINERS CAN DEVELOP INTERNAL PRESSURE AND MAY RUPTURE WHEN SUBJECTED TO EXTREME HEAT.
HAZARDOUS COMBUSTION PRODUCTS:	COMBUSTION CAN PRODUCE CARBON MONOXIDE AND/OR CARBON DIOXIDE.
SPECIAL EQUIPMENT & PRECAUTIONS:	USE SELF-CONTAINED BREATHING APPARATUS IN CONFINED SPACES. OBSERVE RECOMMENDED PROCEDURES FOR HANDLING ORDINARY COMBUSTIBLE MATERIALS.

SECTION 6: ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT, EMERGENCY PROCEDURES:	WEAR WATERPROOF GLOVES TO AVOID SKIN CONTACT. KEEP CHILDREN AND PETS AWAY FROM SPILLED LIQUID. PREVENT LIQUID FROM ENTERING DRAINS.
METHODS AND MATERIALS FOR CONTAINMENT AND CLEAN UP:	DIKE SPILLED LIQUID WITH INERT MATERIAL, SUCH AS CLAY GRANULES. SCOOP UP EXCESS LIQUID AND POUR INTO CONTAINER. USE PAPER OR CLOTH WIPES TO CLEAN UP SMALL SPILLS. ALLOW TO DRY BEFORE DISPOSAL.

SECTION 7: HANDLING AND STORAGE

SAFE HANDLING PRECAUTIONS:	KEEP CONTAINERS CLOSED WHEN NOT IN USE. DO NOT STACK CONTAINERS MORE THAN THREE HIGH. SECURE LOADS AGAINST SHIFTING DURING TRANSPORTATION. USE ONLY AN APPROPRIATE TOOL TO OPEN CONTAINERS.
SAFE STORAGE CONDITIONS:	STORE IN COOL, WELL-VENTILATED AREA. MAINTAIN TEMPERATURE BETWEEN 40°F AND 90°F. AVOID EXPOSURE TO DIRECT SUNLIGHT, HEAT OR FLAME. INSPECT CONTAINERS FOR LEAKS PERIODICALLY. ROTATE STOCK, USE OLDER MATERIAL FIRST.
INCOMPATIBILITIES:	DO NOT HANDLE OR STORE NEAR WATER-REACTIVE MATERIALS, STRONG OXIDIZERS, ACIDS OR ALKALIS.

SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

HAZARDOUS INGREDIENTS	CAS NUMBER	%WT	ACGIH TLV/TWA PPM	OSHA EXPOSURE LIMITS TWA PPM	TWA MG/M³	STEL PPM	STEL MG/M³	VAPOR PRESS mmHg @ TEMP
NO REPORTABLE HAZARDOUS INGREDIENTS.								

ENGINEERING CONTROLS:	USE SIGNS OR BARRIERS TO RESTRICT ACCESS TO PAINTING WORK AREA.
VENTILATION :	NORMAL AIR CIRCULATION SHOULD BE SUFFICIENT. OTHERWISE, USE PORTABLE FANS. ENSURE ADEQUATE VENTILATION DURING APPLICATION, DRYING AND CURING OF PAINT.
RESPIRATORY PROTECTION:	FOR SPRAY APPLICATION, USE PARTICULATE FILTER MASK TO AVOID BREATHING SPRAY MIST. EXPOSED PERSONS WITH UNUSUAL ALLERGIC SENSITIVITY MAY NEED ORGANIC VAPOR RESPIRATOR (NIOSH/MSHA TC 23C OR EQUIVALENT).
EYE PROTECTION:	USE SAFETY GLASSES, GOGGLES, OR FACE SHIELD TO PROTECT EYES.
SKIN PROTECTION:	USE WATERPROOF GLOVES (LATEX, VINYL, RUBBER, OR NEOPRENE) TO AVOID SKIN CONTACT.
OTHER PROTECTIVE CLOTHING OR EQUIPMENT:	WATERPROOF HEADCOVERING AND GENERAL PROTECTIVE CLOTHING ARE RECOMMENDED FOR PROTECTION AS NECESSARY.
WORK HYGIENIC PRACTICES:	WASH HANDS AND FACE BEFORE EATING OR DRINKING.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE:	OPAQUE LIQUID DISPERSION	VAPOR PRESSURE:	SAME AS WATER VAPOR
ODOR:	VERY MILD ODOR	VAPOR DENSITY:	SAME AS WATER VAPOR
ODOR THRESHOLD:	(NO INFORMATION AVAILABLE)	SPECIFIC GRAVITY:	~1.4 (H_2O = 1)
pH AS SUPPLIED:	~8.5	SOLUBILITY IN WATER:	PARTLY SOLUBLE
FREEZING POINT:	0° C / 32° F	PARTITION COEFFICIENT:	(NO INFORMATION AVAILABLE)
BOILING POINT:	100° C / 212° F	AUTO-IGNITION TEMP:	(NOT APPLICABLE)
FLASH POINT:	(NOT APPLICABLE)	DECOMPOSTION TEMP:	(NO INFORMATION AVAILABLE)
EVAPORATION RATE:	SAME AS WATER	VISCOSITY:	85 – 115 KU
FLAMMABILITY:	(NOT APPLICABLE)	PERCENT SOLIDS:	BY VOL: ~35% BY WT: ~50%
UPPER EXPLOSIVE LIMIT:	(NOT APPLICABLE)	PERCENT VOLATILE:	BY VOL: ~65% BY WT: ~50%
LOWER EXPLOSIVE LIMIT:	(NOT APPLICABLE)		

SECTION 10: STABILITY AND REACTIVITY

REACTIVITY:	REACTIVITY NOT KNOWN TO OCCUR UNDER NORMAL CONDITIONS.
CHEMICAL STABILITY:	STABLE UNDER NORMAL CONDITIONS.
POSSIBILITY OF HAZARDOUS REACTIONS:	POLYMERIZATION WILL NOT OCCUR.
CONDITIONS TO AVOID:	AVOID STORAGE OR USE AT TEMPERATURES BELOW 40° F.
INCOMPATIBLE MATERIALS:	AVOID WATER-REACTIVE MATERIALS, STRONG OXIDIZERS, ACIDS AND ALKALIS.
HAZARDOUS DECOMPOSITION PRODUCTS:	COMBUSTION CAN PRODUCE CARBON MONOXIDE AND/OR CARBON DIOXIDE.

SECTION 11: TOXICOLOGICAL INFORMATION

LIKELY ROUTES OF EXPOSURE:	INHALATION, INGESTION, SKIN AND EYE CONTACT
SYMPTOMS OF OVEREXPOSURE:	MAY CAUSE MILD IRRITATION TO EYES AND SKIN, GASTROINTESTINAL AND RESPIRATORY TRACTS. SLIGHT DIZZINESS, NAUSEA AND HEADACHE POSSIBLE IN EXPOSED PERSONS WITH UNUSUAL ALLERGIC SENSITIVITY.
DELAYED OR CHRONIC EFFECTS:	AVAILABLE INFORMATION PROVIDES NO EVIDENCE OF DELAYED OR CHRONIC HEALTH EFFECTS ASSOCIATED WITH EXPOSURE.
NUMERICAL MEASURES OF TOXICITY:	(NO INFORMATION AVAILABLE)
CARCINOGENICITY:	NTP? NO. IARC? NO. OSHA? NO. PROP 65? NO.

SECTION 12: ECOLOGICAL INFORMATION

ECOLOGICAL INFORMATION:	(NO INFORMATION AVAILABLE)

SECTION 13: DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHOD:	COLLECT SPILLED MATERIAL, USED ABSORBENT MATERIAL AND WIPES INTO A SUITABLE CONTAINER AND DISPOSE IN ACCORDANCE WITH ALL APPLICABLE LOCAL, STATE, AND FEDERAL REGULATIONS. DRY, EMPTY CONTAINERS MAY BE RECYCLED OR DISPOSED OF AS ORDINARY TRASH.
RCRA HAZARD CLASS:	NON-HAZARDOUS

SECTION 14: TRANSPORT INFORMATION

THIS MATERIAL IS NOT SUBJECT TO DOT, IATA/ICAO, OR IMO/IMDG TRANSPORTATION REGULATIONS.
ACCEPTABLE FOR AIR TRANSPORT AS NON-HAZARDOUS GOODS.

UN NUMBER:	(NOT APPLICABLE)	UN PROPER SHIPPING NAME:	(NOT APPLICABLE)
TRANSPORT HAZARD CLASS:	(NOT APPLICABLE)	PACKING GROUP:	(NOT APPLICABLE)
ENVIRONMENTAL HAZARDS:	(NOT APPLICABLE)	TRANSPORT IN BULK:	(NOT APPLICABLE)
SPECIAL PRECAUTIONS:	FOLLOW RECOMMENDED PROCEDURES FOR SAFE HANDLING AND STORAGE.		

SECTION 15: REGULATORY INFORMATION

U.S. FEDERAL REGULATIONS:

TSCA:	ALL COMPONENTS ARE LISTED IN TSCA INVENTORY OR EXEMPT.
CERCLA:	NOT LISTED AS A HAZARDOUS SUBSTANCE.
SARA TITLE III:	NOT LISTED AS A HAZARDOUS SUBSTANCE.
311/312 HAZARD CATEGORIES:	(NOT APPLICABLE)
313 REPORTABLE INGREDIENTS:	(NOT APPLICABLE)
STATE REGULATIONS:	(NOT APPLICABLE)

SECTION 16: OTHER INFORMATION

DATE OF PREPARATION: MARCH 1, 2016

PREPARER INFORMATION: DUNN-EDWARDS CORPORATION
ENVIRONMENTAL AFFAIRS DEPARTMENT
PHONE: (323) 826-2663

DISCLAIMER: THE INFORMATION CONVEYED ABOVE, ALTHOUGH OBTAINED FROM SOURCES WE CONSIDER RELIABLE, IS FURNISHED BY DUNN-EDWARDS CORPORATION WITHOUT ANY WARRANTY (WHETHER EXPRESS OR IMPLIED) AS TO ITS ACCURACY, ADEQUACY, OR APPLICABILITY TO ANY PARTICULAR NEEDS OR CIRCUMSTANCES.

SAFETY DATA SHEET

1. Identification

Product identifier	**Zinc-It® Instant Cold Galvanize**
Other means of identification	
Product code	18413
Recommended use	Coating (for use in shop applications or on non-stationary structures)
Recommended restrictions	None known.

Manufacturer/Importer/Supplier/Distributor information

Manufactured or sold by:

Company name	CRC Industries, Inc.
Address	885 Louis Dr. Warminster, PA 18974 US
Telephone	
General Information	215-674-4300
Technical Assistance	800-521-3168
Customer Service	800-272-4620
24-Hour Emergency (CHEMTREC)	800-424-9300 (US) 703-527-3887 (International)
Website	www.crcindustries.com

2. Hazard(s) identification

Physical hazards	Flammable liquids	Category 2
Health hazards	Acute toxicity, oral	Category 4
	Acute toxicity, dermal	Category 4
	Acute toxicity, inhalation	Category 4
	Skin corrosion/irritation	Category 2
	Serious eye damage/eye irritation	Category 2A
	Carcinogenicity	Category 2
	Specific target organ toxicity, single exposure	Category 3 respiratory tract irritation
	Specific target organ toxicity, repeated exposure	Category 1
	Aspiration hazard	Category 1
Environmental hazards	Hazardous to the aquatic environment, long-term hazard	Category 1
OSHA defined hazards	Not classified.	

Label elements

Signal word	Danger
Hazard statement	Highly flammable liquid and vapor. Harmful if swallowed, in contact with skin or if inhaled. May be fatal if swallowed and enters airways. Causes skin irritation. Causes serious eye irritation. May cause respiratory irritation. Suspected of causing cancer by inhalation. Causes damage to organs (central nervous system, liver, kidneys) through prolonged or repeated exposure. Very toxic to aquatic life with long lasting effects.

Precautionary statement

Prevention	Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Use explosion-proof electrical/ventilating/lighting equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Use only with adequate ventilation; maintain ventilation during use and until all vapors are gone. Open doors and windows or use other means to ensure a fresh air supply during use and while product is drying. If you experience any symptoms listed on this label, increase ventilation or leave the area. Do not breathe vapor. Wear protective gloves/protective clothing/eye protection/face protection. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Avoid release to the environment.
Response	If swallowed: Immediately call a poison center/doctor. Rinse mouth. Do NOT induce vomiting. If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. If skin irritation occurs: Get medical attention. Wash contaminated clothing before reuse. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical attention. If inhaled: Remove person to fresh air and keep comfortable for breathing. Call a poison center/doctor if you feel unwell. If exposed or concerned: Get medical attention. In case of fire: Do not use water. Collect spillage.
Storage	Store in a well-ventilated place. Keep container tightly closed. Keep cool. Store locked up.
Disposal	Dispose of contents/container in accordance with local/regional/national regulations.
Hazard(s) not otherwise classified (HNOC)	None known.

Supplemental information

14.5% of the mixture consists of component(s) of unknown long-term hazards to the aquatic environment.

3. Composition/information on ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number	%
Zinc, Elemental		7440-66-6	70 - 80
Xylene		1330-20-7	10 - 20
Aliphatic hydrocarbon		Mixture	1 - 3
Ethylbenzene		100-41-4	1 - 3

Specific chemical identity and/or percentage of composition has been withheld as a trade secret.

4. First-aid measures

Inhalation	Remove victim to fresh air and keep at rest in a position comfortable for breathing. If breathing stops, provide artificial respiration. Oxygen or artificial respiration if needed. Call a POISON CENTER or doctor/physician if you feel unwell.
Skin contact	Take off immediately all contaminated clothing. Wash with plenty of soap and water. Get medical advice/attention if you feel unwell. Wash contaminated clothing before reuse.
Eye contact	Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
Ingestion	Call a physician or poison control center immediately. Do not induce vomiting. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs.
Most important symptoms/effects, acute and delayed	Aspiration may cause pulmonary edema and pneumonitis. Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. May cause respiratory irritation. Skin irritation. May cause redness and pain. Prolonged exposure may cause chronic effects.
Indication of immediate medical attention and special treatment needed	Provide general supportive measures and treat symptomatically. Thermal burns: Flush with water immediately. While flushing, remove clothes which do not adhere to affected area. Call an ambulance. Continue flushing during transport to hospital. Keep victim warm. Keep victim under observation. Symptoms may be delayed.
General information	Take off all contaminated clothing immediately. IF exposed or concerned: Get medical advice/attention. Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance. Wash contaminated clothing before reuse.

5. Fire-fighting measures

Suitable extinguishing media	Foam. Dry chemical powder. Carbon dioxide (CO2).
Unsuitable extinguishing media	Water.

Specific hazards arising from the chemical	Vapors may form explosive mixtures with air. Vapors may travel considerable distance to a source of ignition and flash back. During fire, gases hazardous to health may be formed. Do not use water. Hydrogen gas may form producing an explosive environment.
Special protective equipment and precautions for firefighters	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
Fire-fighting equipment/instructions	In case of fire and/or explosion do not breathe fumes. Move containers from fire area if you can do so without risk. Do not use water. Do not mix with acid or caustic materials.
General fire hazards	Highly flammable liquid and vapor.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures	Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Wear appropriate protective equipment and clothing during clean-up. Avoid inhalation of vapors and spray mists. Do not breathe vapor. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering them. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.
Methods and materials for containment and cleaning up	Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Keep combustibles (wood, paper, oil, etc.) away from spilled material. Take precautionary measures against static discharge. Use only non-sparking tools. Dike far ahead of spill for later disposal. Small Spills: Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal. Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination. Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS.
Environmental precautions	Avoid release to the environment. Inform appropriate managerial or supervisory personnel of all environmental releases. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground.

7. Handling and storage

Precautions for safe handling	Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not handle, store or open near an open flame, sources of heat or sources of ignition. Protect material from direct sunlight. Explosion-proof general and local exhaust ventilation. Take precautionary measures against static discharges. Use non-sparking tools and explosion-proof equipment. Do not breathe vapor. Do not taste or swallow. Avoid inhalation of vapors and spray mists. Avoid contact with eyes, skin, and clothing. Avoid prolonged exposure. When using, do not eat, drink or smoke. Should be handled in closed systems, if possible. Use only outdoors or in a well-ventilated area. Wear appropriate personal protective equipment. Wash hands thoroughly after handling. Avoid release to the environment. Wash contaminated clothing before reuse. Observe good industrial hygiene practices. For product usage instructions, please see the product label. No Smoking in areas where this material is used. Keep containers closed and upright when not in use. If the painted surface is to be welded, use a fan across the work area to prevent fumes from rising to the welder's face. Pump air into welder's hood to provide positive air pressure to prevent fumes from getting to welder.
Conditions for safe storage, including any incompatibilities	Keep away from heat, sparks and open flame. Store in a cool, dry place out of direct sunlight. Keep container tightly closed. Store in a well-ventilated place. Store away from incompatible materials (see Section 10 of the SDS).

8. Exposure controls/personal protection

Occupational exposure limits

U.S. - OSHA

Components	Type	Value
Aliphatic hydrocarbon	TWA	5 mg/m3

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value
Ethylbenzene (CAS 100-41-4)	PEL	435 mg/m3 100 ppm
Xylene (CAS 1330-20-7)	PEL	435 mg/m3 100 ppm

ACGIH

Components	Type	Value
Aliphatic hydrocarbon	TWA	5 mg/m3

US. ACGIH Threshold Limit Values

Components	Type	Value
Ethylbenzene (CAS 100-41-4)	TWA	20 ppm
Xylene (CAS 1330-20-7)	STEL	150 ppm
	TWA	100 ppm

US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value
Ethylbenzene (CAS 100-41-4)	STEL	545 mg/m3
		125 ppm
	TWA	435 mg/m3
		100 ppm

Biological limit values

ACGIH Biological Exposure Indices

Components	Value	Determinant	Specimen	Sampling Time
Ethylbenzene (CAS 100-41-4)	0.15 g/g	Sum of mandelic acid and phenylglyoxylic acid	Creatinine in urine	*
Xylene (CAS 1330-20-7)	1.5 g/g	Methylhippuric acids	Creatinine in urine	*

* - For sampling details, please see the source document.

Appropriate engineering controls Explosion-proof general and local exhaust ventilation. Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Eye wash facilities and emergency shower should be available when handling this product. Provide eyewash station. Eye wash fountain and emergency showers are recommended.

Individual protection measures, such as personal protective equipment

Eye/face protection Wear safety glasses with side shields (or goggles).

Skin protection

Hand protection Wear protective gloves such as: Nitrile. Neoprene.

Other Wear appropriate chemical resistant clothing.

Respiratory protection If engineering controls are not feasible or if exposure exceeds the applicable exposure limits, use a NIOSH-approved cartridge respirator with an organic vapor cartridge. Use a self-contained breathing apparatus in confined spaces and for emergencies. Air monitoring is needed to determine actual employee exposure levels.

Thermal hazards Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations Observe any medical surveillance requirements. When using do not smoke. Wash hands after handling and before eating. Keep away from food and drink.

9. Physical and chemical properties

Appearance

Physical state Liquid.

Form Liquid.

Color Gray.

Odor Solvent.

Odor threshold Not available.

pH Not available.

Melting point/freezing point -138.8 °F (-94.9 °C) estimated

Initial boiling point and boiling range	210 °F (98.9 °C)
Flash point	45 °F (7.2 °C) Tag Closed Cup
Evaporation rate	Slow.
Flammability (solid, gas)	Not available.
Upper/lower flammability or explosive limits	
Flammability limit - lower (%)	0.7 %
Flammability limit - upper (%)	22.7 %
Vapor pressure	1.2 hPa estimated
Vapor density	> 1 (air = 1)
Relative density	2.47
Solubility (water)	Not available.
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	810 °F (432.2 °C) estimated
Decomposition temperature	Not available.
Viscosity (kinematic)	Not available.
Percent volatile	58.1 %

10. Stability and reactivity

Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
Chemical stability	Material is stable under normal conditions.
Possibility of hazardous reactions	No dangerous reaction known under conditions of normal use.
Conditions to avoid	Avoid heat, sparks, open flames and other ignition sources. Contact with incompatible materials.
Incompatible materials	Never add water to this product. Acids. Alkalines. Caustics. Oxidizing agents.
Hazardous decomposition products	Carbon oxides.

11. Toxicological information

Information on likely routes of exposure

Inhalation	Harmful if inhaled. May cause damage to organs through prolonged or repeated exposure by inhalation.
Skin contact	Harmful in contact with skin. Causes skin irritation.
Eye contact	Causes serious eye irritation.
Ingestion	Harmful if swallowed. Droplets of the product aspirated into the lungs through ingestion or vomiting may cause a serious chemical pneumonia.
Symptoms related to the physical, chemical and toxicological characteristics	Aspiration may cause pulmonary edema and pneumonitis. Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. May cause respiratory irritation. Skin irritation. May cause redness and pain.

Information on toxicological effects

Acute toxicity	May be fatal if swallowed and enters airways. Harmful if inhaled. Harmful in contact with skin. May cause respiratory irritation.

Product	Species	Test Results
Zinc-It® Instant Cold Galvanize		
Acute		
Dermal		
LD50	Rabbit	28264 mg/kg estimated
Inhalation		
LC50	Rat	34412 ppm, 4 hours estimated
		151 mg/l, 4 hours estimated

Product	Species	Test Results
Oral		
LD50	Rat	2467 mg/kg estimated

* Estimates for product may be based on additional component data not shown.

Skin corrosion/irritation Causes skin irritation.

Serious eye damage/eye irritation Causes serious eye irritation.

Respiratory sensitization Not a respiratory sensitizer.

Skin sensitization This product is not expected to cause skin sensitization.

Germ cell mutagenicity No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

Carcinogenicity Suspected of causing cancer by inhalation.

IARC Monographs. Overall Evaluation of Carcinogenicity

Ethylbenzene (CAS 100-41-4)	2B Possibly carcinogenic to humans.
Xylene (CAS 1330-20-7)	3 Not classifiable as to carcinogenicity to humans.

US. National Toxicology Program (NTP) Report on Carcinogens

Not available.

Reproductive toxicity This product is not expected to cause reproductive or developmental effects.

Specific target organ toxicity - single exposure May cause respiratory irritation.

Specific target organ toxicity - repeated exposure Causes damage to organs (central nervous system, liver, kidneys) through prolonged or repeated exposure.

Aspiration hazard May be fatal if swallowed and enters airways. If aspirated into lungs during swallowing or vomiting, may cause chemical pneumonia, pulmonary injury or death.

Chronic effects Causes damage to organs through prolonged or repeated exposure.

12. Ecological information

Ecotoxicity Very toxic to aquatic life with long lasting effects.

Product		Species	Test Results
Zinc-It® Instant Cold Galvanize			
Aquatic			
Acute			
Crustacea	EC50	Daphnia	0.0934 mg/l, 48 hours estimated
Components		**Species**	**Test Results**
Ethylbenzene (CAS 100-41-4)			
Aquatic			
Acute			
Crustacea	EC50	Water flea (Daphnia magna)	2.1 mg/l, 48 hours
Fish	LC50	Fathead minnow (Pimephales promelas)	12.1 mg/l, 96 hours
Xylene (CAS 1330-20-7)			
Aquatic			
Fish	LC50	Rainbow trout,donaldson trout (Oncorhynchus mykiss)	9.5 - 19.2 mg/l, 96 hours
Zinc, Elemental (CAS 7440-66-6)			
Aquatic			
Fish	LC50	Bony fish superclass (Osteichthyes)	0.52 - 3.59 mg/l, 96 hours
Acute			
Crustacea	EC50	Water flea (Daphnia magna)	0.068 mg/l, 48 hours
Fish	LC50	Rainbow trout,donaldson trout (Oncorhynchus mykiss)	0.482 mg/l, 96 hours

* Estimates for product may be based on additional component data not shown.

Persistence and degradability No data is available on the degradability of this product.

Bioaccumulative potential

Partition coefficient n-octanol / water (log Kow)

Ethylbenzene	3.15
Xylene	3.12 - 3.2

Bioconcentration factor (BCF)

Xylene	15

Mobility in soil No data available.

Other adverse effects No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

13. Disposal considerations

Disposal of waste from residues / unused products If discarded, this product is considered a RCRA ignitable waste, D001. Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose in accordance with all applicable regulations.

Hazardous waste code D001: Waste Flammable material with a flash point <140 F

Contaminated packaging Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. Transport information

DOT

UN number	UN1263
UN proper shipping name	Paint, Limited Quantity
Transport hazard class(es)	
Class	3
Subsidiary risk	-
Label(s)	3
Packing group	III
Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.
Special provisions	B1, B52, IB3, T2, TP1, TP29
Packaging exceptions	150
Packaging non bulk	173
Packaging bulk	242

IATA

UN number	UN1263
UN proper shipping name	Paint, Limited Quantity
Transport hazard class(es)	
Class	3
Subsidiary risk	-
Packing group	III
Environmental hazards	No.
ERG Code	3L
Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.
Other information	
Passenger and cargo aircraft	Allowed with restrictions.
Cargo aircraft only	Allowed with restrictions.

IMDG

UN number	UN1263
UN proper shipping name	PAINT or PAINT RELATED MATERIAL, LIMITED QUANTITY
Transport hazard class(es)	
Class	3
Subsidiary risk	-
Packing group	III
Environmental hazards	No.
EmS	F-E, S-E
Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.

15. Regulatory information

US federal regulations

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

SARA 304 Emergency release notification

Not regulated.

US EPCRA (SARA Title III) Section 313 - Toxic Chemical: Listed substance

Ethylbenzene (CAS 100-41-4)
Xylene (CAS 1330-20-7)
Zinc, Elemental (CAS 7440-66-6)

CERCLA Hazardous Substance List (40 CFR 302.4)

Ethylbenzene (CAS 100-41-4)
Xylene (CAS 1330-20-7)
Zinc, Elemental (CAS 7440-66-6)

CERCLA Hazardous Substances: Reportable quantity

Ethylbenzene (CAS 100-41-4)	1000 LBS
Xylene (CAS 1330-20-7)	100 LBS
Zinc, Elemental (CAS 7440-66-6)	1000 LBS

Spills or releases resulting in the loss of any ingredient at or above its RQ require immediate notification to the National Response Center (800-424-8802) and to your Local Emergency Planning Committee.

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Ethylbenzene (CAS 100-41-4)
Xylene (CAS 1330-20-7)

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act (SDWA)

Not regulated.

Food and Drug Administration (FDA)

Not regulated.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Section 311/312 Hazard categories	Immediate Hazard - Yes Delayed Hazard - Yes Fire Hazard - Yes Pressure Hazard - No Reactivity Hazard - No
SARA 302 Extremely hazardous substance	No

US state regulations

US. California. Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3, subd. (a))

Ethylbenzene (CAS 100-41-4)
Xylene (CAS 1330-20-7)
Zinc, Elemental (CAS 7440-66-6)

US. Massachusetts RTK - Substance List

Ethylbenzene (CAS 100-41-4)
Xylene (CAS 1330-20-7)
Zinc, Elemental (CAS 7440-66-6)

US. California Controlled Substances. CA Department of Justice (California Health and Safety Code Section 11100)

Not listed.

US. Rhode Island RTK

Ethylbenzene (CAS 100-41-4)
Xylene (CAS 1330-20-7)
Zinc, Elemental (CAS 7440-66-6)

US. New Jersey Worker and Community Right-to-Know Act

Ethylbenzene (CAS 100-41-4)
Xylene (CAS 1330-20-7)

Zinc, Elemental (CAS 7440-66-6)

US. Pennsylvania Worker and Community Right-to-Know Law

Ethylbenzene (CAS 100-41-4)
Xylene (CAS 1330-20-7)
Zinc, Elemental (CAS 7440-66-6)

US. California Proposition 65

WARNING: This product contains a chemical known to the State of California to cause cancer.

US - California Proposition 65 - CRT: Listed date/Carcinogenic substance

Ethylbenzene (CAS 100-41-4) Listed: June 11, 2004

Volatile organic compounds (VOC) regulations

EPA

VOC content (40 CFR 51.100(s))	20 %
Architectural coatings (40 CFR 59, Subpt. D)	Not regulated

State

Architectural coatings	Not regulated
VOC content	493.7 g/l

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	Yes
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	No
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)
A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information, including date of preparation or last revision

Issue date	08-24-2015
Revision date	01-21-2016
Prepared by	Allison Cho
Version #	02
Further information	Not available.
HMIS® ratings	Health: 2* Flammability: 3 Physical hazard: 1 Personal protection: J
NFPA ratings	Health: 2 Flammability: 3 Instability: 1
NFPA ratings	

Disclaimer

The information contained in this document applies to this specific material as supplied. It may not be valid for this material if it is used in combination with any other materials. This information is accurate to the best of CRC Industries' knowledge or obtained from sources believed by CRC to be accurate. Before using any product, read all warnings and directions on the label. For further clarification of any information contained on this (M)SDS consult your supervisor, a health & safety professional, or CRC Industries.

SAFETY DATA SHEET

Date of issue/Date of revision 15 July 2016
Version 5.01

Section 1. Identification

Product name : SPN8024 GLIDDEN SPRED COMPLETE PAINT PLUS PRIMER INT/EXT HIGH GLOSS WHITE

Product code : 00410362

Other means of identification : Not available.

Product type : Liquid.

Relevant identified uses of the substance or mixture and uses advised against

Product use : Industrial applications.

Use of the substance/ mixture : Coating.

Uses advised against : Not applicable.

Manufacturer : PPG Industries, Inc.
One PPG Place
Pittsburgh, PA 15272

Emergency telephone number : (412) 434-4515 (U.S.)
(514) 645-1320 (Canada)
01-800-00-21-400 (Mexico)

Technical Phone Number : 1-800-441-9695 (8:00 am to 5:00 pm EST)

Section 2. Hazards identification

OSHA/HCS status : This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Classification of the substance or mixture : CARCINOGENICITY - Category 2

Percentage of the mixture consisting of ingredient(s) of unknown toxicity: 25.6%

GHS label elements

Hazard pictograms :

Signal word : Warning

Hazard statements : Suspected of causing cancer.

Precautionary statements

Section 2. Hazards identification

Prevention : Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves. Wear eye or face protection. Wear protective clothing.

Response : IF exposed or concerned: Get medical attention.

Storage : Store locked up.

Disposal : Dispose of contents and container in accordance with all local, regional, national and international regulations.

Supplemental label elements : Emits toxic fumes when heated.

Hazards not otherwise classified : None known.

Section 3. Composition/information on ingredients

Substance/mixture : Mixture

Product name : SPN8024 GLIDDEN SPRED COMPLETE PAINT PLUS PRIMER INT/EXT HIGH GLOSS WHITE

Ingredient name	%	CAS number
titanium dioxide	≥10 - ≤20	13463-67-7

SUB codes represent substances without registered CAS Numbers.

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

If ingestion, irritation, any type of overexposure or symptoms of overexposure occur during or persists after use of this product, contact a POISON CONTROL CENTER, EMERGENCY ROOM OR PHYSICIAN immediately; have Safety Data Sheet information available. Never give anything by mouth to an unconscious or convulsing person.

Description of necessary first aid measures

Eye contact : Remove contact lenses, irrigate copiously with clean, fresh water, holding the eyelids apart for at least 10 minutes and seek immediate medical advice.

Inhalation : Remove to fresh air. Keep person warm and at rest. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel.

Skin contact : Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water or use recognized skin cleanser. Do NOT use solvents or thinners.

Ingestion : If swallowed, seek medical advice immediately and show this container or label. Keep person warm and at rest. Do NOT induce vomiting.

Most important symptoms/effects, acute and delayed

Potential acute health effects

Section 4. First aid measures

Eye contact : No known significant effects or critical hazards.

Inhalation : No known significant effects or critical hazards.

Skin contact : No known significant effects or critical hazards.

Ingestion : No known significant effects or critical hazards.

Over-exposure signs/symptoms

Eye contact : No specific data.

Inhalation : No specific data.

Skin contact : No specific data.

Ingestion : No specific data.

Indication of immediate medical attention and special treatment needed, if necessary

Notes to physician : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

Specific treatments : No specific treatment.

Protection of first-aiders : No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media : Use an extinguishing agent suitable for the surrounding fire.

Unsuitable extinguishing media : None known.

Specific hazards arising from the chemical : In a fire or if heated, a pressure increase will occur and the container may burst. This material is harmful to aquatic life. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.

Hazardous thermal decomposition products : Decomposition products may include the following materials:
metal oxide/oxides

Special protective actions for fire-fighters : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

Special protective equipment for fire-fighters : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

For emergency responders : If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

Environmental precautions : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Methods and materials for containment and cleaning up

Small spill : Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

Large spill : Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Section 7. Handling and storage

Precautions for safe handling

Protective measures : Put on appropriate personal protective equipment (see Section 8). Avoid exposure - obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not ingest. Avoid breathing vapor or mist. If during normal use the material presents a respiratory hazard, use only with adequate ventilation or wear appropriate respirator. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.

Special precautions : If this material is part of a multiple component system, read the Safety Data Sheet(s) for the other component or components before blending as the resulting mixture may have the hazards of all of its parts.

Section 7. Handling and storage

Advice on general occupational hygiene : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

Conditions for safe storage, including any incompatibilities : Do not store below the following temperature: 5°C (41°F). Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

Ingredient name	Exposure limits
titanium dioxide	**OSHA PEL (United States, 2/2013).** TWA: 15 mg/m³ 8 hours. Form: Total dust **ACGIH TLV (United States, 3/2015).** TWA: 10 mg/m³ 8 hours.

Key to abbreviations

A = Acceptable Maximum Peak
ACGIH = American Conference of Governmental Industrial Hygienists.
C = Ceiling Limit
F = Fume
IPEL = Internal Permissible Exposure Limit
OSHA = Occupational Safety and Health Administration.
R = Respirable
Z = OSHA 29 CFR 1910.1200 Subpart Z - Toxic and Hazardous Substances
S = Potential skin absorption
SR = Respiratory sensitization
SS = Skin sensitization
STEL = Short term Exposure limit values
TD = Total dust
TLV = Threshold Limit Value
TWA = Time Weighted Average

Consult local authorities for acceptable exposure limits.

Recommended monitoring procedures : If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to appropriate monitoring standards. Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

Appropriate engineering controls : If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

Environmental exposure controls : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Individual protection measures

Section 8. Exposure controls/personal protection

Hygiene measures : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection : Safety glasses with side shields.

Skin protection

Hand protection : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

Body protection : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Other skin protection : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Respiratory protection : Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. If workers are exposed to concentrations above the exposure limit, they must use appropriate, certified respirators. Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary.

Section 9. Physical and chemical properties

Appearance

Physical state : Liquid.

Color : White.

Odor : Characteristic.

Odor threshold : Not available.

pH : Not available.

Melting point : Not available.

Boiling point : 100°C (212°F)

Flash point : Closed cup: Not applicable. [Product does not sustain combustion.]

Auto-ignition temperature : Not available.

Decomposition temperature : Not available.

Flammability (solid, gas) : Not available.

Lower and upper explosive (flammable) limits : Upper: 0%

Evaporation rate : Not available.

Vapor pressure : Not available.

Vapor density : Not available.

Relative density : 1.21

Section 9. Physical and chemical properties

Density (lbs / gal) : 10.1

Solubility : Soluble in the following materials: cold water.

Partition coefficient: n-octanol/water : Not available.

Viscosity : Kinematic (40°C (104°F)): >0.21 cm^2/s (>21 cSt)

Volatility : 63% (v/v), 52.229% (w/w)

% Solid. (w/w) : 47.771

Section 10. Stability and reactivity

Reactivity : No specific test data related to reactivity available for this product or its ingredients.

Chemical stability : The product is stable.

Possibility of hazardous reactions : Under normal conditions of storage and use, hazardous reactions will not occur.

Conditions to avoid : When exposed to high temperatures may produce hazardous decomposition products. Refer to protective measures listed in sections 7 and 8.

Incompatible materials : Keep away from the following materials to prevent strong exothermic reactions: oxidizing agents, strong alkalis, strong acids.

Hazardous decomposition products : Decomposition products may include the following materials: carbon monoxide, carbon dioxide, smoke, oxides of nitrogen.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
titanium dioxide	LD50 Oral	Rat	>11 g/kg	-

Conclusion/Summary : There are no data available on the mixture itself.

Irritation/Corrosion

Conclusion/Summary

Skin : There are no data available on the mixture itself.

Eyes : There are no data available on the mixture itself.

Respiratory : There are no data available on the mixture itself.

Sensitization

Conclusion/Summary

Skin : There are no data available on the mixture itself.

Respiratory : There are no data available on the mixture itself.

Section 11. Toxicological information

Mutagenicity

Conclusion/Summary : There are no data available on the mixture itself.

Carcinogenicity

Conclusion/Summary : There are no data available on the mixture itself.

Classification

Product/ingredient name	OSHA	IARC	NTP
titanium dioxide	-	2B	-

Carcinogen Classification code:

IARC: 1, 2A, 2B, 3, 4
NTP: Known to be a human carcinogen; Reasonably anticipated to be a human carcinogen
OSHA: +
Not listed/not regulated: -

Reproductive toxicity

Conclusion/Summary : There are no data available on the mixture itself.

Teratogenicity

Conclusion/Summary : There are no data available on the mixture itself.

Specific target organ toxicity (single exposure)

Not available.

Specific target organ toxicity (repeated exposure)

Not available.

Target organs : Contains material which may cause damage to the following organs: upper respiratory tract.

Aspiration hazard

Not available.

Information on the likely routes of exposure

Potential acute health effects

Eye contact : No known significant effects or critical hazards.
Inhalation : No known significant effects or critical hazards.
Skin contact : No known significant effects or critical hazards.
Ingestion : No known significant effects or critical hazards.

Over-exposure signs/symptoms

Eye contact : No specific data.
Inhalation : No specific data.
Skin contact : No specific data.
Ingestion : No specific data.

Delayed and immediate effects and also chronic effects from short and long term exposure

Section 11. Toxicological information

Conclusion/Summary : There are no data available on the mixture itself. If splashed in the eyes, the liquid may cause irritation and reversible damage. Ingestion may cause nausea, diarrhea and vomiting. This takes into account, where known, delayed and immediate effects and also chronic effects of components from short-term and long-term exposure by oral, inhalation and dermal routes of exposure and eye contact.

Short term exposure

Potential immediate effects : There are no data available on the mixture itself.

Potential delayed effects : There are no data available on the mixture itself.

Long term exposure

Potential immediate effects : There are no data available on the mixture itself.

Potential delayed effects : There are no data available on the mixture itself.

Potential chronic health effects

General : No known significant effects or critical hazards.

Carcinogenicity : Suspected of causing cancer. Risk of cancer depends on duration and level of exposure.

Mutagenicity : No known significant effects or critical hazards.

Teratogenicity : No known significant effects or critical hazards.

Developmental effects : No known significant effects or critical hazards.

Fertility effects : No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

Not available.

Section 12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure
titanium dioxide	Acute LC50 >100 mg/l Fresh water	Daphnia - Daphnia magna	48 hours

Persistence and degradability

Not available.

Bioaccumulative potential

Not available.

Mobility in soil

Soil/water partition coefficient (K_{OC}) : Not available.

Section 13. Disposal considerations

Disposal methods : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Disposal should be in accordance with applicable regional, national and local laws and regulations.

Refer to Section 7: HANDLING AND STORAGE and Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION for additional handling information and protection of employees. Section 6. Accidental release measures

14. Transport information

	DOT	IMDG	IATA
UN number	Not regulated.	Not regulated.	Not regulated.
UN proper shipping name	-	-	-
Transport hazard class (es)	-	-	-
Packing group	-	-	-
Environmental hazards	No.	No.	No.
Marine pollutant substances	Not applicable.	Not applicable.	Not applicable.

Additional information

DOT : None identified.

IMDG : None identified.

IATA : None identified.

Special precautions for user : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Section 15. Regulatory information

United States

United States inventory (TSCA 8b) : All components are listed or exempted.

United States - TSCA 5(e) - Substances consent order:
partially fluorinated alcohol, reaction products — Listed

United States - TSCA 5(a)2 - Proposed significant new use rules:
partially fluorinated alcohol, reaction products — Listed

SARA 302/304

SARA 304 RQ : Not applicable.

Composition/information on ingredients

No products were found.

SARA 311/312

Classification : Delayed (chronic) health hazard

Composition/information on ingredients

Name	Fire hazard	Sudden release of pressure	Reactive	Immediate (acute) health hazard	Delayed (chronic) health hazard
titanium dioxide	No.	No.	No.	No.	Yes.

Additional environmental information is contained on the Environmental Data Sheet for this product, which can be obtained from your PPG representative.

Section 16. Other information

Hazardous Material Information System (U.S.A.)

Health : 1 * Flammability : 0 Physical hazards : 0

(*) - Chronic effects

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks Although HMIS® ratings are not required on MSDSs under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered mark of the National Paint & Coatings Association (NPCA). HMIS® materials may be purchased exclusively from J. J. Keller (800) 327-6868.

The customer is responsible for determining the PPE code for this material.

National Fire Protection Association (U.S.A.)

Health : 1 Flammability : 0 Instability : 0

Date of previous issue : 5/1/2016

Organization that prepared the MSDS : EHS

Section 16. Other information

Key to abbreviations : ATE = Acute Toxicity Estimate
BCF = Bioconcentration Factor
GHS = Globally Harmonized System of Classification and Labelling of Chemicals
IATA = International Air Transport Association
IBC = Intermediate Bulk Container
IMDG = International Maritime Dangerous Goods
LogPow = logarithm of the octanol/water partition coefficient
MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
UN = United Nations

Indicates information that has changed from previously issued version.

Disclaimer

The information contained in this data sheet is based on present scientific and technical knowledge. The purpose of this information is to draw attention to the health and safety aspects concerning the products supplied by PPG, and to recommend precautionary measures for the storage and handling of the products. No warranty or guarantee is given in respect of the properties of the products. No liability can be accepted for any failure to observe the precautionary measures described in this data sheet or for any misuse of the products.

SAFETY DATA SHEET

H60LL4

Section 1. Identification

Product name : Enamel
BFI Blue

Product code : H60LL4

Other means of identification : Not available.

CAS # : Not applicable.

Product type : Liquid.

Relevant identified uses of the substance or mixture and uses advised against

Not applicable.

Manufacturer : THE SHERWIN-WILLIAMS COMPANY
101 W. Prospect Avenue
Cleveland, OH 44115

Emergency telephone number of the company : (216) 566-2917

Product Information Telephone Number : Not available.

Regulatory Information Telephone Number : (216) 566-2902

Transportation Emergency Telephone Number : (800) 424-9300

Section 2. Hazards identification

OSHA/HCS status : This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Classification of the substance or mixture : FLAMMABLE LIQUIDS - Category 3
ACUTE TOXICITY (oral) - Category 4
SKIN CORROSION/IRRITATION - Category 2
SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2A
SKIN SENSITIZATION - Category 1
CARCINOGENICITY - Category 2
TOXIC TO REPRODUCTION (Unborn child) - Category 1B
TOXIC TO REPRODUCTION (Fertility) - Category 2
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3
SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2
ASPIRATION HAZARD - Category 1

Percentage of the mixture consisting of ingredient(s) of unknown toxicity: 2.9%

GHS label elements

Hazard pictograms :

Signal word : Danger

Section 2. Hazards identification

Hazard statements : Flammable liquid and vapor.
Harmful if swallowed.
Causes serious eye irritation.
Causes skin irritation.
May cause an allergic skin reaction.
May damage the unborn child.
Suspected of damaging fertility.
Suspected of causing cancer.
May be fatal if swallowed and enters airways.
May cause respiratory irritation.
May cause drowsiness or dizziness.
May cause damage to organs through prolonged or repeated exposure.

Precautionary statements

Prevention : Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves. Wear eye or face protection. Wear protective clothing. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use explosion-proof electrical, ventilating, lighting and all material-handling equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Keep container tightly closed. Use only outdoors or in a well-ventilated area. Do not breathe vapor. Do not eat, drink or smoke when using this product. Wash hands thoroughly after handling. Contaminated work clothing must not be allowed out of the workplace.

Response : Get medical attention if you feel unwell. IF exposed or concerned: Get medical attention. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or physician if you feel unwell. IF SWALLOWED: Immediately call a POISON CENTER or physician. Rinse mouth. Do NOT induce vomiting. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. IF ON SKIN: Wash with plenty of soap and water. Wash contaminated clothing before reuse. If skin irritation or rash occurs: Get medical attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical attention.

Storage : Store locked up. Store in a well-ventilated place. Keep cool.

Disposal : Dispose of contents and container in accordance with all local, regional, national and international regulations.

Supplemental label elements

DANGER: Rags, steel wool, other waste soaked with this product, and sanding residue may spontaneously catch fire if improperly discarded. Immediately place rags, steel wool, other waste soaked with this product, and sanding residue in a sealed, water-filled, metal container. Dispose of in accordance with local fire regulations. DELAYED EFFECTS FROM LONG TERM OVEREXPOSURE. Contains solvents which can cause permanent brain and nervous system damage. Intentional misuse by deliberately concentrating and inhaling the contents can be harmful or fatal. WARNING: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm. FOR INDUSTRIAL USE ONLY.

Please refer to the SDS for additional information. Keep out of reach of children. Do not transfer contents to other containers for storage.

Hazards not otherwise classified : None known.

Section 3. Composition/information on ingredients

Substance/mixture : Mixture

Other means of identification : Not available.

CAS number/other identifiers

Section 3. Composition/information on ingredients

gredient name	% by weight	CAS number
Toluene	27.87	108-88-3
Xylene	23.47	1330-20-7
Ethylbenzene	4.15	100-41-4
Diacetone Alcohol	1.78	123-42-2
Titanium Dioxide	1.74	13463-67-7
Med. Aliphatic Hydrocarbon Solvent	1.18	64742-88-7
Carbon Black	0.25	1333-86-4
1-Methyl-2-Pyrrolidone	0.25	872-50-4
Cobalt 2-Ethylhexanoate	0.15	136-52-7
Zirconium 2-Ethylhexanoate	0.11	22464-99-9

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

Description of necessary first aid measures

Eye contact : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.

Inhalation : Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention. If necessary, call a poison center or physician. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

Skin contact : Wash with plenty of soap and water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Get medical attention. In the event of any complaints or symptoms, avoid further exposure. Wash clothing before reuse. Clean shoes thoroughly before reuse.

Ingestion : Get medical attention immediately. Call a poison center or physician. Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Aspiration hazard if swallowed. Can enter lungs and cause damage. Do not induce vomiting. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Most important symptoms/effects, acute and delayed

Potential acute health effects

Eye contact : Causes serious eye irritation.

Inhalation : Can cause central nervous system (CNS) depression. May cause drowsiness or dizziness. May cause respiratory irritation.

Skin contact : Causes skin irritation. May cause an allergic skin reaction.

Section 4. First aid measures

Ingestion : Harmful if swallowed. Can cause central nervous system (CNS) depression. May be fatal if swallowed and enters airways.

Over-exposure signs/symptoms

Eye contact : Adverse symptoms may include the following:
pain or irritation
watering
redness

Inhalation : Adverse symptoms may include the following:
respiratory tract irritation
coughing
nausea or vomiting
headache
drowsiness/fatigue
dizziness/vertigo
unconsciousness
reduced fetal weight
increase in fetal deaths
skeletal malformations

Skin contact : Adverse symptoms may include the following:
irritation
redness
reduced fetal weight
increase in fetal deaths
skeletal malformations

Ingestion : Adverse symptoms may include the following:
nausea or vomiting
reduced fetal weight
increase in fetal deaths
skeletal malformations

Indication of immediate medical attention and special treatment needed, if necessary

Notes to physician : In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

Specific treatments : No specific treatment.

Protection of first-aiders : No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media : Use dry chemical, CO_2, water spray (fog) or foam.

Unsuitable extinguishing media : Do not use water jet.

Specific hazards arising from the chemical : Flammable liquid and vapor. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. The vapor/gas is heavier than air and will spread along the ground. Vapors may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back. Runoff to sewer may create fire or explosion hazard.

Section 5. Fire-fighting measures

Hazardous thermal decomposition products : Decomposition products may include the following materials:
carbon dioxide
carbon monoxide
nitrogen oxides
metal oxide/oxides

Special protective actions for fire-fighters : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

Special protective equipment for fire-fighters : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

For emergency responders : If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

Environmental precautions : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Methods and materials for containment and cleaning up

Small spill : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

Large spill : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Section 7. Handling and storage

Precautions for safe handling

Protective measures : Put on appropriate personal protective equipment (see Section 8). Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Avoid exposure - obtain special instructions before use. Avoid exposure during pregnancy. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not swallow. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof

Section 7. Handling and storage

electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Take precautionary measures against electrostatic discharges. Empty containers retain product residue and can be hazardous. Do not reuse container.

Advice on general occupational hygiene : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

Conditions for safe storage, including any incompatibilities : Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits (OSHA United States)

Ingredient name	Exposure limits
Toluene	**OSHA PEL Z2 (United States, 2/2013).** TWA: 200 ppm 8 hours. CEIL: 300 ppm AMP: 500 ppm 10 minutes. **NIOSH REL (United States, 10/2013).** TWA: 100 ppm 10 hours. TWA: 375 mg/m³ 10 hours. STEL: 150 ppm 15 minutes. STEL: 560 mg/m³ 15 minutes. **ACGIH TLV (United States, 3/2015).** TWA: 20 ppm 8 hours.
Xylene	**ACGIH TLV (United States, 3/2015).** TWA: 100 ppm 8 hours. TWA: 434 mg/m³ 8 hours. STEL: 150 ppm 15 minutes. STEL: 651 mg/m³ 15 minutes. **OSHA PEL (United States, 2/2013).** TWA: 100 ppm 8 hours. TWA: 435 mg/m³ 8 hours.
Ethylbenzene	**ACGIH TLV (United States, 3/2015).** TWA: 20 ppm 8 hours. **NIOSH REL (United States, 10/2013).** TWA: 100 ppm 10 hours. TWA: 435 mg/m³ 10 hours. STEL: 125 ppm 15 minutes. STEL: 545 mg/m³ 15 minutes. **OSHA PEL (United States, 2/2013).** TWA: 100 ppm 8 hours. TWA: 435 mg/m³ 8 hours.
Diacetone Alcohol	**ACGIH TLV (United States, 3/2015).** TWA: 50 ppm 8 hours. TWA: 238 mg/m³ 8 hours. **NIOSH REL (United States, 10/2013).** TWA: 50 ppm 10 hours. TWA: 240 mg/m³ 10 hours.

Section 8. Exposure controls/personal protection

	OSHA PEL (United States, 2/2013). TWA: 50 ppm 8 hours. TWA: 240 mg/m³ 8 hours.
Titanium Dioxide	**ACGIH TLV (United States, 3/2015).** TWA: 10 mg/m³ 8 hours. **OSHA PEL (United States, 2/2013).** TWA: 15 mg/m³ 8 hours. Form: Total dust
Med. Aliphatic Hydrocarbon Solvent	**OSHA PEL (United States, 2/2013).** TWA: 100 ppm 8 hours. TWA: 400 mg/m³ 8 hours.
Carbon Black	**NIOSH REL (United States, 10/2013).** TWA: 3.5 mg/m³ 10 hours. TWA: 0.1 mg of PAHs/cm³ 10 hours. **OSHA PEL (United States, 2/2013).** TWA: 3.5 mg/m³ 8 hours. **ACGIH TLV (United States, 3/2015).** TWA: 3 mg/m³ 8 hours. Form: Inhalable fraction
1-Methyl-2-Pyrrolidone	**AIHA WEEL (United States, 10/2011).** **Absorbed through skin.** TWA: 10 ppm 8 hours.
Cobalt 2-Ethylhexanoate	**ACGIH TLV (United States, 3/2015).** TWA: 0.02 mg/m³, (as Co) 8 hours.
Zirconium 2-Ethylhexanoate	**ACGIH TLV (United States, 3/2015).** TWA: 5 mg/m³, (as Zr) 8 hours. STEL: 10 mg/m³, (as Zr) 15 minutes. **NIOSH REL (United States, 10/2013).** TWA: 5 mg/m³, (as Zr) 10 hours. STEL: 10 mg/m³, (as Zr) 15 minutes. **OSHA PEL (United States, 2/2013).** TWA: 5 mg/m³, (as Zr) 8 hours.

Occupational exposure limits (Canada)

Ingredient name	Exposure limits
Toluene	**CA Alberta Provincial (Canada, 4/2009).** **Absorbed through skin.** 8 hrs OEL: 50 ppm 8 hours. 8 hrs OEL: 188 mg/m³ 8 hours. **CA British Columbia Provincial (Canada, 5/2015).** TWA: 20 ppm 8 hours. **CA Ontario Provincial (Canada, 7/2015).** TWA: 20 ppm 8 hours. **CA Quebec Provincial (Canada, 1/2014).** **Absorbed through skin.** TWAEV: 50 ppm 8 hours. TWAEV: 188 mg/m³ 8 hours. **CA Saskatchewan Provincial (Canada, 7/2013). Absorbed through skin.** STEL: 60 ppm 15 minutes. TWA: 50 ppm 8 hours.
Xylene	**CA Alberta Provincial (Canada, 4/2009).** 8 hrs OEL: 100 ppm 8 hours. 15 min OEL: 651 mg/m³ 15 minutes. 15 min OEL: 150 ppm 15 minutes. 8 hrs OEL: 434 mg/m³ 8 hours.

Section 8. Exposure controls/personal protection

	CA British Columbia Provincial (Canada, 5/2015). TWA: 100 ppm 8 hours. STEL: 150 ppm 15 minutes. **CA Quebec Provincial (Canada, 1/2014).** TWAEV: 100 ppm 8 hours. TWAEV: 434 mg/m³ 8 hours. STEV: 150 ppm 15 minutes. STEV: 651 mg/m³ 15 minutes. **CA Ontario Provincial (Canada, 7/2015).** STEL: 150 ppm 15 minutes. TWA: 100 ppm 8 hours. **CA Saskatchewan Provincial (Canada, 7/2013).** STEL: 150 ppm 15 minutes. TWA: 100 ppm 8 hours.
Cobalt 2-Ethylhexanoate	**CA Ontario Provincial (Canada, 7/2015).** TWA: 0.02 mg/m³, (as Co) 8 hours. Form: Inorganic **CA British Columbia Provincial (Canada, 5/2015).** TWA: 0.02 mg/m³, (as Co) 8 hours. **CA Quebec Provincial (Canada, 1/2014). Skin sensitizer.** TWAEV: 0.02 mg/m³, (as Co) 8 hours. **CA Saskatchewan Provincial (Canada, 7/2013).** STEL: 0.06 mg/m³, (measured as Co) 15 minutes. TWA: 0.02 mg/m³, (measured as Co) 8 hours.
Zirconium 2-Ethylhexanoate	**CA Alberta Provincial (Canada, 4/2009).** 8 hrs OEL: 5 mg/m³, (as Zr) 8 hours. 15 min OEL: 10 mg/m³, (as Zr) 15 minutes. **CA British Columbia Provincial (Canada, 5/2015).** TWA: 5 mg/m³, (as Zr) 8 hours. STEL: 10 mg/m³, (as Zr) 15 minutes. **CA Quebec Provincial (Canada, 1/2014).** TWAEV: 5 mg/m³, (as Zr) 8 hours. STEV: 10 mg/m³, (as Zr) 15 minutes. **CA Ontario Provincial (Canada, 7/2015).** STEL: 10 mg/m³, (as Zr) 15 minutes. TWA: 5 mg/m³, (as Zr) 8 hours.

Appropriate engineering controls : Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

Environmental exposure controls : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Individual protection measures

Section 8. Exposure controls/personal protection

Hygiene measures : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles.

Skin protection

Hand protection : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

Body protection : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. When there is a risk of ignition from static electricity, wear anti-static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves.

Other skin protection : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Respiratory protection : Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

Section 9. Physical and chemical properties

Appearance

Physical state : Liquid.

Color : Not available.

Odor : Not available.

Odor threshold : Not available.

pH : Not available.

Melting point : Not available.

Boiling point : 105°C (221°F)

Flash point : Closed cup: 27°C (80.6°F) [Pensky-Martens Closed Cup]

Evaporation rate : 2 (butyl acetate = 1)

Flammability (solid, gas) : Not available.

Lower and upper explosive (flammable) limits : Lower: 1%
Upper: 13.1%

Vapor pressure : 0.39 kPa (2.933 mm Hg) [at 20°C]

Vapor density : 3.1 [Air = 1]

Relative density : 0.97

Solubility : Not available.

Partition coefficient: n-octanol/water : Not available.

Auto-ignition temperature : Not available.

Decomposition temperature : Not available.

Section 9. Physical and chemical properties

Viscosity : Kinematic (room temperature): <0.205 cm^2/s (<20.5 cSt)
Kinematic (40°C (104°F)): <0.205 cm^2/s (<20.5 cSt)

Molecular weight : Not applicable.

Aerosol product

Heat of combustion : 18.78 kJ/g

Section 10. Stability and reactivity

Reactivity : No specific test data related to reactivity available for this product or its ingredients.

Chemical stability : The product is stable.

Possibility of hazardous reactions : Under normal conditions of storage and use, hazardous reactions will not occur.

Conditions to avoid : Avoid all possible sources of ignition (spark or flame). Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition. Do not allow vapor to accumulate in low or confined areas.

Incompatible materials : Reactive or incompatible with the following materials:
oxidizing materials

Hazardous decomposition products : Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Toluene	LC50 Inhalation Vapor	Rat	49 g/m^3	4 hours
	LD50 Oral	Rat	636 mg/kg	-
Xylene	LC50 Inhalation Gas.	Rat	5000 ppm	4 hours
	LD50 Oral	Rat	4300 mg/kg	-
Ethylbenzene	LD50 Dermal	Rabbit	>5000 mg/kg	-
	LD50 Oral	Rat	3500 mg/kg	-
Diacetone Alcohol	LD50 Dermal	Rabbit	13500 mg/kg	-
	LD50 Oral	Rat	2520 mg/kg	-
Carbon Black	LD50 Oral	Rat	>15400 mg/kg	-
1-Methyl-2-Pyrrolidone	LD50 Dermal	Rabbit	8 g/kg	-
	LD50 Oral	Rat	3914 mg/kg	-
Cobalt 2-Ethylhexanoate	LD50 Dermal	Rabbit	>5 g/kg	-
	LD50 Oral	Rat	1.22 g/kg	-
Zirconium 2-Ethylhexanoate	LD50 Dermal	Rabbit	>5 g/kg	-
	LD50 Oral	Rat	>5 g/kg	-

Irritation/Corrosion

Section 11. Toxicological information

Product/ingredient name	Result	Species	Score	Exposure	Observation
Toluene	Eyes - Mild irritant	Rabbit	-	0.5 minutes 100 milligrams	-
	Eyes - Mild irritant	Rabbit	-	870 Micrograms	-
	Eyes - Severe irritant	Rabbit	-	24 hours 2 milligrams	-
	Skin - Mild irritant	Pig	-	24 hours 250 microliters	-
	Skin - Mild irritant	Rabbit	-	435 milligrams	-
	Skin - Moderate irritant	Rabbit	-	24 hours 20 milligrams	-
	Skin - Moderate irritant	Rabbit	-	500 milligrams	-
Xylene	Eyes - Mild irritant	Rabbit	-	87 milligrams	-
	Eyes - Severe irritant	Rabbit	-	24 hours 5 milligrams	-
	Skin - Mild irritant	Rat	-	8 hours 60 microliters	-
	Skin - Moderate irritant	Rabbit	-	24 hours 500 milligrams	-
	Skin - Moderate irritant	Rabbit	-	100 Percent	-
Ethylbenzene	Eyes - Severe irritant	Rabbit	-	500 milligrams	-
	Skin - Mild irritant	Rabbit	-	24 hours 15 milligrams	-
Diacetone Alcohol	Eyes - Severe irritant	Rabbit	-	20 milligrams	-
	Eyes - Severe irritant	Rabbit	-	24 hours 100 microliters	-
	Skin - Mild irritant	Rabbit	-	500 milligrams	-
Titanium Dioxide	Skin - Mild irritant	Human	-	72 hours 300 Micrograms Intermittent	-
1-Methyl-2-Pyrrolidone	Eyes - Moderate irritant	Rabbit	-	100 milligrams	-

Sensitization

Not available.

Mutagenicity

Not available.

Carcinogenicity

Not available.

Classification

Product/ingredient name	OSHA	IARC	NTP
Toluene	-	3	-
Xylene	-	3	-
Ethylbenzene	-	2B	-
Titanium Dioxide	-	2B	-
Carbon Black	-	2B	-
Cobalt 2-Ethylhexanoate	-	2B	-

Reproductive toxicity

Not available.

Section 11. Toxicological information

Teratogenicity

Not available.

Specific target organ toxicity (single exposure)

Name	Category	Route of exposure	Target organs
Toluene	Category 3	Not applicable.	Respiratory tract irritation and Narcotic effects
Xylene	Category 3	Not applicable.	Respiratory tract irritation and Narcotic effects
Ethylbenzene	Category 3	Not applicable.	Respiratory tract irritation and Narcotic effects
Diacetone Alcohol	Category 3	Not applicable.	Respiratory tract irritation and Narcotic effects
Med. Aliphatic Hydrocarbon Solvent	Category 3	Not applicable.	Respiratory tract irritation and Narcotic effects

Specific target organ toxicity (repeated exposure)

Name	Category	Route of exposure	Target organs
Toluene	Category 2	Not determined	Not determined
Xylene	Category 2	Not determined	Not determined
Ethylbenzene	Category 2	Not determined	Not determined
Diacetone Alcohol	Category 2	Not determined	Not determined
Med. Aliphatic Hydrocarbon Solvent	Category 2	Not determined	Not determined

Aspiration hazard

Name	Result
Toluene	ASPIRATION HAZARD - Category 1
Xylene	ASPIRATION HAZARD - Category 1
Ethylbenzene	ASPIRATION HAZARD - Category 1
Med. Aliphatic Hydrocarbon Solvent	ASPIRATION HAZARD - Category 1

Information on the likely routes of exposure : Not available.

Potential acute health effects

Eye contact : Causes serious eye irritation.

Inhalation : Can cause central nervous system (CNS) depression. May cause drowsiness or dizziness. May cause respiratory irritation.

Skin contact : Causes skin irritation. May cause an allergic skin reaction.

Ingestion : Harmful if swallowed. Can cause central nervous system (CNS) depression. May be fatal if swallowed and enters airways.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact : Adverse symptoms may include the following:
pain or irritation
watering
redness

Inhalation : Adverse symptoms may include the following:
respiratory tract irritation
coughing
nausea or vomiting
headache
drowsiness/fatigue
dizziness/vertigo
unconsciousness
reduced fetal weight
increase in fetal deaths
skeletal malformations

Skin contact : Adverse symptoms may include the following:
irritation
redness
reduced fetal weight
increase in fetal deaths
skeletal malformations

Ingestion : Adverse symptoms may include the following:
nausea or vomiting
reduced fetal weight
increase in fetal deaths
skeletal malformations

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

ng term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Potential chronic health effects

Not available.

General : May cause damage to organs through prolonged or repeated exposure. Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.

Carcinogenicity : Suspected of causing cancer. Risk of cancer depends on duration and level of exposure.

Mutagenicity : No known significant effects or critical hazards.

Teratogenicity : May damage the unborn child.

Developmental effects : No known significant effects or critical hazards.

Fertility effects : Suspected of damaging fertility.

Numerical measures of toxicity

Acute toxicity estimates

Route	ATE value
Oral	1954.5 mg/kg
Inhalation (gases)	21305.7 ppm

Section 12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure
Toluene	Acute EC50 12500 µg/l Fresh water	Algae - Pseudokirchneriella subcapitata	72 hours
	Acute EC50 11600 µg/l Fresh water	Crustaceans - Gammarus pseudolimnaeus - Adult	48 hours
	Acute EC50 6000 µg/l Fresh water	Daphnia - Daphnia magna - Juvenile (Fledgling, Hatchling, Weanling)	48 hours
	Acute LC50 5500 µg/l Fresh water	Fish - Oncorhynchus kisutch - Fry	96 hours
	Chronic NOEC 1000 µg/l Fresh water	Daphnia - Daphnia magna	21 days
Xylene	Acute LC50 8500 µg/l Marine water	Crustaceans - Palaemonetes pugio	48 hours
	Acute LC50 13400 µg/l Fresh water	Fish - Pimephales promelas	96 hours
Ethylbenzene	Acute EC50 4600 µg/l Fresh water	Algae - Pseudokirchneriella subcapitata	72 hours
	Acute EC50 3600 µg/l Fresh water	Algae - Pseudokirchneriella subcapitata	96 hours
	Acute EC50 6530 µg/l Fresh water	Crustaceans - Artemia sp. - Nauplii	48 hours
	Acute EC50 2930 µg/l Fresh water	Daphnia - Daphnia magna - Neonate	48 hours
	Acute LC50 4200 µg/l Fresh water	Fish - Oncorhynchus mykiss	96 hours
Diacetone Alcohol	Acute LC50 420000 µg/l Marine water	Fish - Menidia beryllina	96 hours
Titanium Dioxide	Acute LC50 >1000000 µg/l Marine water	Fish - Fundulus heteroclitus	96 hours
1-Methyl-2-Pyrrolidone	Acute LC50 1.23 ppm Fresh water	Daphnia - Daphnia magna	48 hours
	Acute LC50 832 ppm Fresh water	Fish - Lepomis macrochirus	96 hours

Persistence and degradability

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
Toluene	-	-	Readily
Xylene	-	-	Readily
Ethylbenzene	-	-	Readily

Bioaccumulative potential

Product/ingredient name	$LogP_{ow}$	BCF	Potential
Toluene	-	90	low
Xylene	-	8.1 to 25.9	low
Cobalt 2-Ethylhexanoate	-	15600	high
Zirconium 2-Ethylhexanoate	-	2.96	low

Mobility in soil

Soil/water partition coefficient (K_{OC}) : Not available.

Other adverse effects : No known significant effects or critical hazards.

Section 13. Disposal considerations

sposal methods : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Vapor from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport information

	DOT Classification	TDG Classification	Mexico Classification	IATA	IMDG
UN number	UN1263	UN1263	UN1263	UN1263	UN1263
UN proper shipping name	PAINT	PAINT	PAINT	PAINT	PAINT
Transport hazard class(es)	3 	3 	3 	3 	3 
Packing group	III	III	III	III	III
Environmental hazards	No.	No.	No.	No.	No.
Additional information	- **ERG No.** 128	Product classified as per the following sections of the Transportation of Dangerous Goods Regulations: 2. 18-2.19 (Class 3). **ERG No.** 128	- **ERG No.** 128	-	**Emergency schedules (EmS)** F-E, S-E

Special precautions for user : Multi-modal shipping descriptions are provided for informational purposes and do not consider container sizes. The presence of a shipping description for a particular mode of transport (sea, air, etc.), does not indicate that the product is packaged suitably for that mode of transport. All packaging must be reviewed for suitability prior to shipment, and compliance with the applicable regulations is the sole responsibility of the person offering the product for transport. People loading and unloading dangerous goods must be trained on all of the risks deriving from the substances and on all actions in case of emergency situations.

Transport in bulk according to Annex II of MARPOL and the IBC Code : Not available.

Proper shipping name : Not available.

Section 14. Transport information

Ship type	:	Not available.
Pollution category	:	Not available.

Section 15. Regulatory information

SARA 313

SARA 313 (40 CFR 372.45) supplier notification can be found on the Environmental Data Sheet.

California Prop. 65

WARNING: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

Section 16. Other information

Hazardous Material Information System (U.S.A.)

The customer is responsible for determining the PPE code for this material.

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks Although HMIS® ratings are not required on SDSs under 29 CFR 1910. 1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered mark of the National Paint & Coatings Association (NPCA). HMIS® materials may be purchased exclusively from J. J. Keller (800) 327-6868.

Procedure used to derive the classification

Classification	Justification
FLAMMABLE LIQUIDS - Category 3	On basis of test data
ACUTE TOXICITY (oral) - Category 4	Calculation method
SKIN CORROSION/IRRITATION - Category 2	Calculation method
SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2A	Calculation method
SKIN SENSITIZATION - Category 1	Calculation method
CARCINOGENICITY - Category 2	Calculation method
TOXIC TO REPRODUCTION (Unborn child) - Category 1B	Calculation method
TOXIC TO REPRODUCTION (Fertility) - Category 2	Calculation method
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3	Calculation method
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3	Calculation method
SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2	Calculation method
ASPIRATION HAZARD - Category 1	Calculation method

History

Date of printing	:	8/11/2016
Date of issue/Date of revision	:	8/11/2016
Date of previous issue	:	6/20/2016
Version	:	4

Section 16. Other information

Key to abbreviations : ATE = Acute Toxicity Estimate
BCF = Bioconcentration Factor
GHS = Globally Harmonized System of Classification and Labelling of Chemicals
IATA = International Air Transport Association
IBC = Intermediate Bulk Container
IMDG = International Maritime Dangerous Goods
LogPow = logarithm of the octanol/water partition coefficient
MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
UN = United Nations

Notice to reader

It is recommended that each customer or recipient of this Safety Data Sheet (SDS) study it carefully and consult resources, as necessary or appropriate, to become aware of and understand the data contained in this SDS and any hazards associated with the product. This information is provided in good faith and believed to be accurate as of the effective date herein. However, no warranty, express or implied, is given. The information presented here applies only to the product as shipped. The addition of any material can change the composition, hazards and risks of the product. Products shall not be repackaged, modified, or tinted except as specifically instructed by Sherwin-Williams, including but not limited to the incorporation of non Sherwin-Williams products or the use or addition of products in proportions not specified by Sherwin-Williams. Regulatory requirements are subject to change and may differ between various locations and jurisdictions. The customer/buyer/user is responsible to ensure that his activities comply with all country, federal, state, provincial or local laws. The conditions for use of the product are not under the control of the manufacturer; the customer/buyer/user is responsible to determine the conditions necessary for the safe use of this product. The customer/buyer/user should not use the product for any purpose other than the purpose shown in the applicable section of this SDS without first referring to the supplier and obtaining written handling instructions. Due to the proliferation of sources for information such as manufacturer-specific SDS, the manufacturer cannot be responsible for SDSs obtained from any other source.

SAFETY DATA SHEET

B42GF1700

Section 1. Identification

Product name : Latex Primer
Arch Green

Product code : B42GF1700

Other means of identification : Not available.

CAS # : Not applicable.

Product type : Liquid.

Relevant identified uses of the substance or mixture and uses advised against

Not applicable.

Manufacturer : THE SHERWIN-WILLIAMS COMPANY
101 W. Prospect Avenue
Cleveland, OH 44115

Emergency telephone number of the company : (216) 566-2917

Product Information Telephone Number : Not available.

Regulatory Information Telephone Number : (216) 566-2902

Transportation Emergency Telephone Number : (800) 424-9300

Section 2. Hazards identification

OSHA/HCS status : This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Classification of the substance or mixture : CARCINOGENICITY - Category 2
SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2
Percentage of the mixture consisting of ingredient(s) of unknown toxicity: 9.1%

GHS label elements

Hazard pictograms :

Signal word : Warning

Hazard statements : Suspected of causing cancer.
May cause damage to organs through prolonged or repeated exposure.

Precautionary statements

General : Read label before use. Keep out of reach of children. If medical advice is needed, have product container or label at hand.

Prevention : Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves. Wear eye or face protection. Wear protective clothing. Do not breathe vapor.

Response : Get medical attention if you feel unwell. IF exposed or concerned: Get medical attention.

Storage : Store locked up.

Section 2. Hazards identification

Disposal : Dispose of contents and container in accordance with all local, regional, national and international regulations.

Supplemental label elements

WARNING: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

Please refer to the SDS for additional information. Keep out of reach of children. Do not transfer contents to other containers for storage.

Hazards not otherwise classified : None known.

Section 3. Composition/information on ingredients

Substance/mixture : Mixture

Other means of identification : Not available.

CAS number/other identifiers

Ingredient name	% by weight	CAS number
Titanium Dioxide	9.1	13463-67-7
Butoxypropanol	1.41	5131-66-8

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

Description of necessary first aid measures

Eye contact : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.

Inhalation : Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Skin contact : Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Continue to rinse for at least 10 minutes. Get medical attention. Wash clothing before reuse. Clean shoes thoroughly before reuse.

Ingestion : Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

st important symptoms/effects, acute and delayed

Potential acute health effects

Eye contact : No known significant effects or critical hazards.

Inhalation : No known significant effects or critical hazards.

Skin contact : No known significant effects or critical hazards.

Section 4. First aid measures

Ingestion : No known significant effects or critical hazards.

Over-exposure signs/symptoms

Eye contact : No specific data.

Inhalation : No specific data.

Skin contact : No specific data.

Ingestion : No specific data.

Indication of immediate medical attention and special treatment needed, if necessary

Notes to physician : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

Specific treatments : No specific treatment.

Protection of first-aiders : No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media : Use an extinguishing agent suitable for the surrounding fire.

Unsuitable extinguishing media : None known.

Specific hazards arising from the chemical : In a fire or if heated, a pressure increase will occur and the container may burst.

Hazardous thermal decomposition products : Decomposition products may include the following materials:
carbon dioxide
carbon monoxide
metal oxide/oxides

Special protective actions for fire-fighters : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

Special protective equipment for fire-fighters : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

For emergency responders : If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

Environmental precautions : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Methods and materials for containment and cleaning up

Section 6. Accidental release measures

mall spill : Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

Large spill : Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Section 7. Handling and storage

Precautions for safe handling

Protective measures : Put on appropriate personal protective equipment (see Section 8). Avoid exposure - obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. If during normal use the material presents a respiratory hazard, use only with adequate ventilation or wear appropriate respirator. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.

Advice on general occupational hygiene : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

Conditions for safe storage, including any incompatibilities : Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits (OSHA United States)

Ingredient name	Exposure limits
Titanium Dioxide	**ACGIH TLV (United States, 3/2015).** TWA: 10 mg/m³ 8 hours. **OSHA PEL (United States, 2/2013).** TWA: 15 mg/m³ 8 hours. Form: Total dust
Butoxypropanol	None.

Occupational exposure limits (Canada)

Ingredient name	Exposure limits
None.	

Appropriate engineering controls : If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

Section 8. Exposure controls/personal protection

Environmental exposure controls : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Individual protection measures

Hygiene measures : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields.

Skin protection

Hand protection : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

Body protection : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Other skin protection : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Respiratory protection : Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

Section 9. Physical and chemical properties

Appearance

Physical state : Liquid.

Color : Not available.

Odor : Not available.

Odor threshold : Not available.

pH : 8.6

Melting point : Not available.

Boiling point : 100°C (212°F)

Flash point : Closed cup: >93.3°C (>199.9°F)

Evaporation rate : 0.09 (butyl acetate = 1)

Flammability (solid, gas) : Not available.

Lower and upper explosive (flammable) limits : Lower: 1.1%
Upper: 14.4%

Vapor pressure : 0.31 kPa (2.333 mm Hg) [at 20°C]

Vapor density : 1 [Air = 1]

Relative density : 1.36

Solubility : Not available.

Section 9. Physical and chemical properties

tition coefficient: n-anol/water : Not available.

Auto-ignition temperature : Not available.

Decomposition temperature : Not available.

Viscosity : Kinematic (40°C (104°F)): >0.205 cm^2/s (>20.5 cSt)

Molecular weight : Not applicable.

Aerosol product

Heat of combustion : 0.729 kJ/g

Section 10. Stability and reactivity

Reactivity : No specific test data related to reactivity available for this product or its ingredients.

Chemical stability : The product is stable.

Possibility of hazardous reactions : Under normal conditions of storage and use, hazardous reactions will not occur.

Conditions to avoid : No specific data.

Incompatible materials : No specific data.

Hazardous decomposition ducts : Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Butoxypropanol	LD50 Dermal	Rabbit	3100 mg/kg	-

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
Titanium Dioxide	Skin - Mild irritant	Human	-	72 hours 300 Micrograms Intermittent	-

Sensitization

Not available.

Mutagenicity

Not available.

Carcinogenicity

Not available.

Classification

Product/ingredient name	OSHA	IARC	NTP
Titanium Dioxide	-	2B	-

Reproductive toxicity

Not available.

Section 11. Toxicological information

Teratogenicity

Not available.

Specific target organ toxicity (single exposure)

Name	Category	Route of exposure	Target organs
Butoxypropanol	Category 3	Not applicable.	Respiratory tract irritation and Narcotic effects

Specific target organ toxicity (repeated exposure)

Name	Category	Route of exposure	Target organs
Butoxypropanol	Category 2	Not determined	Not determined

Aspiration hazard

Not available.

Information on the likely routes of exposure : Not available.

Potential acute health effects

Eye contact : No known significant effects or critical hazards.

Inhalation : No known significant effects or critical hazards.

Skin contact : No known significant effects or critical hazards.

Ingestion : No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact : No specific data.

Inhalation : No specific data.

Skin contact : No specific data.

Ingestion : No specific data.

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Long term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Potential chronic health effects

Not available.

General : May cause damage to organs through prolonged or repeated exposure.

Carcinogenicity : Suspected of causing cancer. Risk of cancer depends on duration and level of exposure.

Mutagenicity : No known significant effects or critical hazards.

Teratogenicity : No known significant effects or critical hazards.

Developmental effects : No known significant effects or critical hazards.

Fertility effects : No known significant effects or critical hazards.

merical measures of toxicity

Acute toxicity estimates

Route	ATE value
Dermal	220456.7 mg/kg

Section 12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure
Titanium Dioxide	Acute LC50 >1000000 µg/l Marine water	Fish - Fundulus heteroclitus	96 hours

Persistence and degradability

Not available.

Bioaccumulative potential

Not available.

Mobility in soil

Soil/water partition coefficient (K_{OC}) : Not available.

Other adverse effects : No known significant effects or critical hazards.

Section 13. Disposal considerations

Disposal methods : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport information

	DOT Classification	TDG Classification	Mexico Classification	IATA	IMDG
UN number	Not regulated.	Not regulated.	Not regulated.	Not regulated.	Not regulated.
N proper shipping name	-	-	-	-	-

Section 14. Transport information

Transport hazard class(es)	-	-	-	-	-
Packing group	-	-	-	-	-
Environmental hazards	No.	No.	No.	No.	No.
Additional information	-	-	-	-	-

Special precautions for user : Multi-modal shipping descriptions are provided for informational purposes and do not consider container sizes. The presence of a shipping description for a particular mode of transport (sea, air, etc.), does not indicate that the product is packaged suitably for that mode of transport. All packaging must be reviewed for suitability prior to shipment, and compliance with the applicable regulations is the sole responsibility of the person offering the product for transport. People loading and unloading dangerous goods must be trained on all of the risks deriving from the substances and on all actions in case of emergency situations.

Transport in bulk according to Annex II of MARPOL and the IBC Code : Not available.

Proper shipping name : Not available.
Ship type : Not available.
Pollution category : Not available.

Section 15. Regulatory information

SARA 313

SARA 313 (40 CFR 372.45) supplier notification can be found on the Environmental Data Sheet.

California Prop. 65

WARNING: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

Section 16. Other information

Hazardous Material Information System (U.S.A.)

The customer is responsible for determining the PPE code for this material.

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks Although HMIS® ratings are not required on SDSs under 29 CFR 1910. 1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered mark of the National Paint & Coatings Association (NPCA). HMIS® materials may be purchased exclusively from J. J. Keller (800) 327-6868.

Procedure used to derive the classification

Classification	Justification
CARCINOGENICITY - Category 2	Calculation method
SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2	Calculation method

Section 16. Other information

istory

Date of printing	:	10/25/2016
Date of issue/Date of revision	:	10/25/2016
Date of previous issue	:	9/19/2016
Version	:	3.04
Key to abbreviations	:	ATE = Acute Toxicity Estimate BCF = Bioconcentration Factor GHS = Globally Harmonized System of Classification and Labelling of Chemicals IATA = International Air Transport Association IBC = Intermediate Bulk Container IMDG = International Maritime Dangerous Goods LogPow = logarithm of the octanol/water partition coefficient MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution) UN = United Nations

Notice to reader

It is recommended that each customer or recipient of this Safety Data Sheet (SDS) study it carefully and consult resources, as necessary or appropriate, to become aware of and understand the data contained in this SDS and any hazards associated with the product. This information is provided in good faith and believed to be accurate as of the effective date herein. However, no warranty, express or implied, is given. The information presented here applies only to the product as shipped. The addition of any material can change the composition, hazards and risks of the product. Products shall not be repackaged, modified, or tinted except as specifically instructed by Sherwin-Williams, including but not limited to the incorporation of non Sherwin-Williams products or the use or addition of products in proportions not specified by Sherwin-Williams. Regulatory requirements are subject to change and may differ between various locations and jurisdictions. The customer/buyer/user is responsible to ensure that his activities comply with all country, federal, state, provincial or local laws. The conditions for use of the product are not under the control of the manufacturer; the customer/buyer/user is responsible to determine the conditions necessary for the safe use of this product. The customer/buyer/user should not use the product for any purpose other than the purpose shown in the applicable section of this SDS without first referring to the supplier and obtaining written handling instructions. Due to the proliferation of sources for information such as manufacturer-specific SDS, the manufacturer cannot be responsible for SDSs obtained from any other source.

SAFETY DATA SHEET

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY

TRADE NAME: NO. 1010A WHITE

CHEMICAL FAMILY: ALKYD TYPE, AROMATIC/STODDARD SOLVENT

MAIN USE: FLAME RETARDANT COATING

MANUFACTURER'S NAME / ADDRESS: **FLAME CONTROL COATINGS LLC**
4120 HYDE PARK BLVD.
NIAGARA FALLS, N.Y. 14305

EMERGENCY TELEPHONE NUMBER: 800-535-5053

ISSUE DATE: FEBRUARY 15, 2016 **REVISION DATE:** **PREPARED BY:** P. PISARSKI

SECTION 2: HAZARDS IDENTIFICATION

CLASSIFICATION: WHITE PIGMENTED LIQUID, AROMATIC/STODDARD SOLVENT ODOR

IMPORTANT HAZARDS:

FLAMMABLE LIQUID- CATEGORY 3
SKIN CORROSION/IRRITATION- CATEGORY 2
SERIOUS EYE DAMAGE/EYE IRRATATION- CATEGORY 2A
CARCINOGENICITY- CATEGORY 2B
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE)
(RESPIRATORY TRACT IRRITATION)- CATEGORY 3
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE)
(NARCOTIC EFFECTS)- CATEGORY 3
SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE)- CATEGORY 1
ASPIRATION HAZARD- CATEGORY 1

GHS LABEL ELEMENTS HAZARD PICTOGRAMS:

EMERGENCY OVERVIEW:

DANGER!
FLAMMABLE LIQUID AND VAPOR
HARMFUL OR FATAL IF SWALLOWED
HARMFUL IF INHALED
CAUSES RESPIRATORY TRACT, EYE AND SKIN IRRITATION
CONTAINS MATERIAL WHICH CAUSES DAMAGE TO THE FOLLOWING ORGANS: BLOOD, KIDNEYS, LIVER, GASTROINTESTINAL TRACT, RESPIRATORY TRACT, SKIN, NERVOUS SYSTEM, EYE, LENSE OR CORNEA
VAPOR MAY CAUSE FLASH FIRE
MAY BE HARMFUL IF ABSORBED THROUGH SKIN
POSSIBLE CANCER HAZARD
CONTAINS MATERIAL WHICH CAN CAUSE CANCER

PRIMARY ROUTES OF ENTRY: EYE CONTACT, SKIN CONTACT, INHALATION, INGESTION

HEALTH HAZARDS (ACUTE AND CHRONIC EXPOSURES)

EYES:
ACUTE – LIQUID, AEROSOLS OR VAPORS ARE SEVERELY IRRITATING AND CAN CAUSE PAIN, TEARING, REDDENING AND SWELLING. IF LEFT UNTREATED, CORNEAL DAMAGE CAN OCCUR AND INJURY IS SLOW TO HEAL. HOWEVER, DAMAGE IS USUALLY REVERSIBLE.
CHRONIC – PROLONGED VAPOR CONTACT MAY CAUSE CONJUNCTIVITIS.

SECTION 2: HAZARDS IDENTIFICATION (CON'T)

SKIN CONTACT:
ACUTE – REPEATED OR PROLONGED SKIN CONTACT CAN RESULT IN DRY, DEFATTED AND CRACKED SKIN CAUSING INCREASED SUSCEPTIBILITY TO INFECTION. IN ADDITION IRRITATION MAY DEVELOP INTO DERMATITUS. SOLVENTS CAN PENETRATE THE SKIN AND MAY CAUSE EFFECTS SIMILAR TO THOSE IDENTIFIED UNDER ACUTE INHALATION SYMPTOMS.
CHRONIC – MAY CAUSE EFFECTS SIMILAR TO THOSE IDENTIFIED UNDER CHRONIC INHALATION EFFECTS.

SKIN ABSORPTION:
ACUTE – ND
CHRONIC – ND

INHALATION:
ACUTE – SOLVENT VAPORS ARE IRRITATING TO THE EYES, NOSE, AND THROAT. SYMPTOMS OF IRRITATION MAY INCLUDE RED, ITCHY EYES, DRYNESS OF THE THROATAND A FEELING OF TIGHTNESS IN THE CHEST. OTHER POSSIBLE SYMPTOMS OF OVEREXPOSURE INCLUDE: HEADACHE, DIZZINESS, NAUSEA, NARCOSIS FATIGUE AND LOSS OF APPETITE.
CHRONIC – CHRONIC EXPOSURE TO ORGANIC SOLVENTS HAS BEEN ASSOCIATED WITH VARIOUS NEUROTOXIC EFFECTS INCLUDING PERMANENT BRAIN AND NERVOUS SYSTEM DAMAGE. SYMPTOMS INCLUDE LOSS OF MEMORY, LOSS OF INTELLECTUAL ABILITY AND LOSS OF COORDINATION. TOLUENE HAS BEEN DEMONSTRATED TO BE EMBRYOFETOTOXIC AND TERATOGENIC IN LABORATORY ANIMALS. PROLONGED OR REPEATED OVEREXPOSURE TO TOLUENE CAN CAUSE IRRITATION TO THE RESPIRATORY TRACT, ENLARGED LIVER, KIDNEY EFFECTS AND CARDIAC SENSITIZATION.

INGESTION:
ACUTE – CAN RESULT IN IRRITATION OF THE DIGESTIVE TRACT. SYMPTOMS CAN INCLUDE SORE THROAT ABDOMINAL PAIN NAUSEA, VOMITING AND DIARRHEA. VOMITING MAY CAUSE ASPIRATION OF SOLVENT RESULTING IN CHEMICAL PNEUMONITIS
CHRONIC – ND

CONDITIONS AGGRAVATED BY EXPOSURE: SKIN DISORDERS AND ALLERGIES

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

SUBSTANCE/MIXTURE: MIXTURE

OTHER MEANS OF IDENTIFICATION: NOT AVAILABLE

HAZARDOUS INGREDIENTS	Wt. %	CAS Number
ALIPHATIC HYDROCARBONS (STODDARD TYPE)	10-30	008052-41-3
*1,2,4 TRIMETHYL BENZENE	0.1-1.0	000095-63-6
PARACHLOROBENZOTRIFLOURIDE	7-15	000098-56-6
TITANIUM DIOXIDE	5-10	013463-67-7
1,3,5 TRIAZINE 2,4,6 TRIAMINE	7-15	000108-78-1
AROMATIC PETROLEUM DISTILLATES	1-5	064742-95-6

* COMPONENT PRESENT WITHIN CAS #008052-41-3

SECTION 4: FIRST AID MEASURES

GENERAL: REMOVE PERSON FROM AFFECTED AREA AND MAKE COMFORTABLE. TREAT SYMPTOMATICALLY.

EYES: FLUSH WITH WATER FOR 15 MINUTES. GET MEDICAL ATTENTION.

SKIN: REMOVE PRODUCT AND FLUSH AFFECTED AREA WITH WATER FOR 15 MINUTES. IF IRRITATION PERSISTS, SEEK MEDICAL ATTENTION.

INHALATION: MOVE TO FRESH AIR. GIVE ASSISTED RESPIRATION IF BREATHING HAS STOPPED OR IS LABORED (CALL A PHYSICIAN).

INGESTION: GIVE 3 – 4 GLASSES OF WATER OR MILK IF PERSON CONSCIOUS. **DO NOT INDUCE VOMITING!** OBTAIN MEDICAL CARE AND TREATMENT.

SECTION 4: FIRST AID MEASURES (CON'T)

NOTES TO PHYSICIAN: ACUTE MASSIVE EXPOSURE TO TOLUENE CAN CAUSE TRANSIENT HEMATURIA AND ALBUMINURIA. CARDIAC ARRHYTHMIAS CAN OCCUR AFTER MASSIVE INHALATION.

SECTION 5: FIRE FIGHTING MEASURES

EXTINGUISHNG MEDIA: IGNITION MAY GIVE RISE TO A CLASS B FIRE. IN CASE OF FIRE USE: WATER FOG, CARBON DIOXIDE, DRY CHEMICAL, OR ALCOHOL FOAM.

SPECIFIC HAZARDS ARISING FROM CHEMICAL: FLAMABLE LIQUID AND VAPOR. IN A FIRE OR IF HEATED A PRESSURE INCREASE WILL OCCUR AND THE CONTAINER MAY BURST, WITH THE RISK OF A SUBSEQUENT EXPLOSION. VAPOR IS HEAVIER THAN AIR AND WILL SPREAD ACROSS THE GROUND.

HAZARDOUS DECOMPOSITION PRODUCTS: CO, CO_2

HAZARDOUS POLYMERIZATION (REACTIVITY): WILL NOT OCCUR.

SPECIAL FIRE FIGHTING PROCEDURES: WEAR SELF-CONTAINED BREATHING APPARATUS AND PROTECTIVE CLOTHING. WATER SPRAY IS USEFUL IN COOLING FIRE-EXPOSED VESSELS AND IN DISPERSING VAPORS.

UNUSUAL FIRE AND EXPLOSIVE HAZARDS: MAY GENERATE TOXIC OR IRRITATING COMBUSTION PRODUCTS. SUDDEN REACTION AND FIRE MAY RESULT IF PRODUCT IS MIXED WITH AN OXIDIZING AGENT. SOLVENT VAPORS MAY BE HEAVIER THAN AIR. UNDER CONDITIONS OF STAGNANT AIR, VAPORS MAY BUILD UP AND TRAVEL ALONG THE GROUND TO AN IGNITION SOURCE.

SECTION 6: ACCIDENTAL RELEASE MEASURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: SHUT OFF SOURCES OF IGNITION. COVER SPILLS WITH ABSORBENT. PLACE IN METAL CONTAINERS FOR RECOVERY OR DISPOSAL. PREVENT ENTRY INTO SEWERS, STORM DRAINS, AND WATERWAYS.

SECTION 7: HANDLING AND STORAGE

GENERAL: STORE IN COOL, WELL VENTILATED AREAS. KEEP AWAY FROM HEAT AND OPEN FLAMES. AVOID PROLONGED INHALATION OF HEATED VAPORS OR MISTS. AVOID PROLONGED SKIN CONTACT. USE NON-SPARKING TOOLS AND GROUNDING CABLES WHEN TRANSFERRING. CONTAINERS MAY BE HAZARDOUS WHEN EMPTY.

STORAGE: AVOID TEMPERATURE EXTREMES. STORE AWAY FROM EXCESSIVE HEAT, FROM SOURCES OF IGNITION AND FROM REACTIVE MATERIALS. MATERIAL CAN BURN; LIMIT INDOOR STORAGE TO AREAS EQUIPPED WITH AUTOMATIC SPRINKLERS. STORE OUT OF DIRECT SUNLIGHT IN A COOL PLACE. KEEP CONTAINERS TIGHTLY CLOSED. GROUND ALL METAL CONTAINERS DURING STORAGE AND HANDLING.

SECTION 8: EXPOSURE CONTROL/PERSONAL PROTECTION

INGREDIENTS (CAS)	EXPOSURE LIMITS (ppm) OSHA TWA	OSHA STEL	ACGIH TWA	ACGIH STEL	OTHER
008052-41-3*	100	NE	400	NE	
000095-63-6*	25	NE	25	NE	
000098-56-6	NE	NE	NE	NE	
014807-96-6	2mg/m^3	ND	5mg/m^3	ND	(SEE NOTE 1)
000108-78-1	NE	NE	NE	NE	
064742-95-6	NE	NE	NE	NE	

* THIS PRODUCT MAY CONTAIN THE FOLLOWING

LEGEND: (M) MAX. EXPOSURE LIMIT; (S) OCCUPATIONAL EXP. LIMIT; (R) SUPPLIERS REC. LIMIT, (+) PERCUTANEOUS RISK
NOTE 1: VALUES MEANINGFUL ONLY WHEN HARDENED PRODUCT IS ABRADED, GROUND, ETC.

ENGINEERING CONTROLS: EXHAUST VENTILATION IS SUFFICIENT TO KEEP AIRBORNE CONCENTRATION OF THE SOLVENTS BELOW THEIR RESPECTIVE TLV'S. EXHAUST AIR MAY NEED TO BE CLEANED BY SCRUBBERS OR FILTERS TO REDUCE ENVIRONMENTAL CONTAMINATION.

SECTION 8: EXPOSURE CONTROL/PERSONAL PROTECTION (CON'T)

RESPIRATORY PROTECTION: NONE REQUIRED IN ADEQUATELY VENTILATED AREAS. IF VAPOR CONCENTRATION EXCEEDS 20ppm FOR LONGER THAN 15 MINUTES, A NIOSH APPROVED RESPIRATOR FOR ORGANIC VAPORS IS RECOMMENDED.

PROTECTIVE GLOVES: NITRILE RUBBER.

EYE PROTECTION: SPLASH-PROOF GOGGLES OR CHEMICAL SAFETY GLASSES.

OTHER PROTECTIVE EQUIPMENT: LONG SLEEVED SHIRTS AND TROUSERS. EMERGENCY SHOWERS AND EYE WASH STATIONS SHOULD BE READILY ACCESSIBLE.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE

PHYSICAL STATE: LIQUID

COLOR: WHITE

ODOR: AROMATIC/STODDARD SOLVENT

pH: NA

MELTING POINT: ND

BOILING POINT: 157 C (315 F)

FLASHPOINT: 40.6°C (105°F) TCC

EVAPORATION RATE: 0.11 (BUTYL ACETATE = 1)

COEFFICIENT OF WATER/OIL DISTRIBUTION: ND

% VOLATILES BY VOLUME: 49%

FLAMMABLE LIMITS: NOT AVAILABLE

LOWER EXPLOSION LIMIT: 1%

UPPER EXPLOSION LIMIT: 6%

VAPOR PRESSURE: 2 mm Hg

VAPOR DENSITY: 4.9 (AIR = 1)

SPECIFIC GRAVITY: 1.3-1.4

SOLUBILITY IN WATER: INSOLUBLE

AUTO IGNITION TEMP: 232°C (450°F)

% SOLIDS BY WT: 66%

SECTION 10: STABILITY AND REACTIVITY

STABILITY: STABLE; HOWEVER MAY FORM PEROXIDES OF UNKNOWN STABILITY

CONDITIONS TO AVOID: NOT APPLICABLE (MATERIAL IS STABLE).

INCOMPATIBILITY (MATERIAL TO AVOID): OXIDIZING AGENTS (PERCHLORATES, NITRATES), STRONG ACIDS, HYPOCHLORITES, AND PEROXIDES SHOULD NOT BE COMBINED WITH PHOSPHOROUS CONTAINING MATERIALS BECAUSE HIGHLY TOXIC FUMES CAN BE EMITTED IN A FIRE SITUATION.

SECTION 11: TOXICOLOGICAL INFORMATION

ACUTE TOXICITY

PRODUCT/INGREDIENT NAME	RESULT	SPECIES	DOSE	EXPOSURE
p-Chlorobenzotrifluoride	LD50 ORAL	RAT	13 g/kg	-

CARCINOGENICITY

PRODUCT/INGREDIENT NAME	OSHA	IARC	NTP
Titanium Dioxide	-	2B	-

SECTION 11: TOXICOLOGICAL INFORMATION (CON'T)

SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE)

PRODUCT/INGREDIENT NAME	CATEGORY	ROUTE OF EXPOSURE	TARGET ORGANS
p-Chlorobenzotrifluoride	CATEGORY 3	N/A	RESPIRATORY TRACT IRRATAION AND NARCOTIC EFFECTS
Aliphatic Hydrocarbons	CATEGORY 3	N/A	NARCOTIC EFFECTS

SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE)

PRODUCT/INGREDIENT NAME	CATEGORY	ROUTE OF EXPOSURE	TARGET ORGANS
p-Chlorobenzotrifluoride	CATEGORY 2	N/D	N/D

POTENTIAL ACUTE HEALTH EFFECTS

EYE: CAUSES SERIOUS EYE IRRATATION
INHALATION: CAN CAUSE CNS DEPRESSION, MAY CAUSE DROWSINESS AND DIZZINESS, REPIRATORY IRRATATION
SKIN CONTACT: CASUES SKIN IRRATAION
INGESTION: CAN CAUSE CNS DEPRESSION MAY BE FATAL IF SWALLOWED

POTENTIAL CHRONIC EFFECTS

GENERAL: MAY CAUSE DAMAGE TO ORGANS THROUGH PROLONGED AND REPEATED EXPOSURE
TERATOGENICITY: YES
MUTAGENICITY: NO
EMBRYOTOXICITY: NO

SECTION 12: ECOLOGICAL INFORMATION

TOXICITY: NA

PERSISTANCE AND DEGRADABILITY: NA

BIOACCUMULATIVE POTENTIAL: NA

SECTION 13: DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHODS: INCINERATION IS PREFERRED. COMPLY WITH ALL FEDERAL, STATE AND LOCAL REGULATIONS. RCRA CLASSIFIED HAZARDOUS WASTE WITH CHARACTERISTIC OF IGNITABILITY.

SECTION 14: TRANSPORT INFORMATION

	DOT CLASSIFICATION	TDG CLASSIFICATION	MEXICO CLASSIFICATION	IATA	IMDG
UN NUMBER	UN1263	UN1263	UN1263	UN1263	UN1263
UN PROPER SHIPPING NAME	PAINT	PAINT	PAINT	PAINT	PAINT
TRANSPORT HAZARD CLASS(ES)	3 	3 	3 	3 	3 
PACKING GROUP	III	III	III	III	III
ENVIRONMENTAL HAZARD	NO	NO	NO	NO	NO
ADDITIONAL HAZARD	Special provisions Not Applicable **ERG No.**128	Product classified as per the following sections of the Transportation of Dangerous Goods Regulations: 2. 18-2.19 (Class 3). **ERG No.**128	Special provisions (ERG#128) **ERG No.**128	Special provisions Not Applicable	Emergency schedules (EmS) F-E, S-E

SECTION 15: REGULATORY INFORMATION

MATERIAL VOC = 292 gram/ liter **COATING VOC** = 328 gram/liter

TSCA (TOXIC SUBSTANCE CONTROL ACT): ALL COMPONENTS ARE LISTED IN THE TSCA CHEMICAL SUBSTANCE INVENTORY.

CERCLA (COMPREHENSIVE RESPONSE COMPENSATION and LIABILITY ACT): REPORTABLE QUANTITY, TOLUENE 1000 LBS.

SARA TITLE III

SECTION 312 HAZARD CLASS: IMMEDIATE (ACUTE) HEALTH HAZARD, DELAYED HEALTH HAZARD; FIRE HAZARD

SECTION 313 LISTED INGREDIENTS: 1,2,4 TRIMETHYL BENZENE (CAS #000095-65-6)

CALIFORNIA PROPOSITION 65: THE BELOW LIST OF COMPOUNDS IS KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER, BIRTH DEFECTS OR OTHER REPRODUCIVE HARM: CAS #000108-88-3.

SECTION 16: OTHER INFORMATION

HAZARD RATING

HMIS:	**HEALTH**	**2**	**FLAMMABILITY**	**3**	**REACTIVITY**	**0**

LEGEND

ACGIH:	AMERICAN CONFERENCE OF GOVERNMENTAL INDUSTRIAL HYGEIENISTS
OSHA:	OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION
STEL:	SHORT TERM EXPOSURE LIMIT
TWA:	TIME WEIGHTED AVERAGE
PEL:	PERMISSABLE EXPOSURE LIMIT
TLV:	THRESHOLD LIMIT VALUE
NA:	NOT APPLICABLE
NE:	NOT ESTABLISHED
ND:	NO DATA

Safety Data Sheet

Section 1, Identification

Product Identifier: T- 21 Industrial Paint Remover
Synonyms: Semi-Paste Paint Remover
CAS No.: Mixture
Manufacture Stock Number: T-21
Intended Use: Paint and Finish Remover

Manufacturer:
Besway Systems, Inc.
305 Williams Ave.
Madison, TN. 37115
Phone: (615) 865-8310
Fax: (615) 865-8327

Emergency Phone: 1(800) 424-9300 Chemtrec 24 hour
Information Phone: (615) 865-8310

Section 2, Hazards Identification

Classification:

Toxic if Swallowed H301 (category 3)
Causes skin irritation (Category 2), H315
Causes serious eye irritation (Category 2A), H319
May cause respiratory irritation, H335
Carcinogenicity (category 2), H351
Specific target organ toxicity - single exposure (category 3), Respiratory system, Central nervous system, H335, H336
Specific target organ toxicity - repeated exposure, oral (category 2) Liver/ blood. H373
Specific target organ toxicity – repeated exposure, inhalation (category 2) Central nervous system, H373

GHS-US Classification in accordance with 29 CFR 1910 (OSHA HCS)

Signal Word: Danger!
Pictogram:

Hazard Statement:

H301 Toxic if Swallowed.
H315 Causes skin irritation.
H319 Causes eye irritation.
H335 Causes respiratory irritation.
H336 May cause drowsiness or dizziness.
H351 Suspected of causing cancer.
H373 May cause damage to organs (liver, blood) through repeated or

prolonged exposure if swallowed.
H373 May cause damage to organs (Central nervous system) through repeated or prolonged exposure if inhaled.

Precautionary Statements: P201 Obtain Special instructions before use.
P202 Do not handle until all safety precaution have been read and understood.
P234 Keep only in original container
P261 Avoid breathing fumes, gas, mist, vapors or spray.
P262 Do not get in eyes, on skin, or on clothing.
P263 Avoid contact during pregnancy or while nursing.
P264 Wash thoroughly after handling.
P270 Do not eat/drink/smoke while using this product.
P281 Use personal protective equipment as required. (See section 8)
P284 Keep away from heat/sparks/open flame/hot surfaces - No Smoking.

Unknown Acute Toxicity: No additional information available.
Hazards not Otherwise Classified: No additional information available.

Section 3, Composition/Information on Ingredients

CAS No.	Ingredient Name	Weight Percentage
75-09-2	Methylene Chloride	70 - 80 %
67-56-1	Methanol	10 - 20 %
108-88-3	Toluene	2 – 3 %

Occupational exposure limits, if available, are listed in section 8
Regulatory information listed in section 15

Section 4, First Aid Measures

Eye: Flush with large amounts of water for at least 15 minutes, lifting upper and lower lids occasionally. Get medical attention.
Ingestion: Call physician, poison control center, or hospital emergency room IMMEDIATELY.
NEVER GIVE ANYTHING TO AN UNCONCIOUS PERSON.
Skin: Thoroughly wash exposed areas with soap and water. Remove contaminated clothing.
Launder contaminated clothing before re-use.
Inhalation: Move affected individual to fresh air. If breathing is difficult, administer oxygen. If breathing has stopped, give artificial respiration. Keep person warm, quiet, and get medical attention.

Section 5, Fire Fighting Measures

Suitable Extinguishing Media: Use water spray, alcohol resistant foam, dry chemical or carbon dioxide.
Unsuitable Extinguishing Media: Do not use a heavy water stream. This may spread burning liquid.
Fire Fighting Instructions: Exercise caution when fighting any chemical fire. Use self contained breathing apparatus and protective clothing. Use water spray to keep fire exposed containers cool.
Unusual Fire and explosion hazards: This product contains chlorinated solvents, which can form flammable vapor/air mixtures at elevated temperatures (above ambient) . At high temperatures (during fire) the product decomposes, creating Hydrochloric acid gas and Carbon Monoxide.

Section 6, Accidental Release Measures

Emergency Procedures: Stop spillage/leakage at the source if safe to do so. Remove sources of ignition. Evacuate personnel to safe areas. Ensure adequate ventilation of affected area.
Personal Protective Equipment: Use required personal protective equipment. See section 8.
General Measures: Cover spilled product with an inert absorbent i.e. Vermiculite or similar material.

Place wet absorbent into metal container and secure with lid. Label container with appropriate information. **Do not use saw dust.**
Environmental Precautions: Prevent further leakage or spillage if safe to do so. Do not allow product to enter drains.
Reference to other sections: Section 8, Exposure Controls and Personal Protection.

Section 7, Handling and Storage

Handling: Avoid contact with skin or eyes. See section 2
Storage: Keep container tightly closed and store in a dry well ventilated area. Do not store in direct sunlight. Open slowly, product can develop unsafe pressure if stored in direct sunlight or above 80 F.

Section 8, Exposure Controls and Personal Protection

Occupational Exposure Limits:

Ingredient	USA- ACGIH TLV	USA- OSHA TLV
Methylene Chloride	50 ppm TWA	125 ppm STEL, 25 ppm TWA
Methanol	250 ppm STEL	200 ppm TWA
Toluene	100 ppm STEL	200 ppm STEL, 300 ppm Ceiling

Appropriate Engineering Controls: Controlling vapor concentrations with exhaust fans is always recommended when working indoors. Always refer to the SDS in regards to permitted exposure levels. Local exhaust ventilation is necessary for most applications, including working outdoors. Monitoring badges for Methylene Chloride are recommended to determine vapor concentrations in your work areas. Contact Besway Systems, Inc. for further information.
Personal Protective Equipment: Splash goggles/face shield, chemical resistant gloves, Chemical resistant apron and proper foot protection i.e. steel toe boots. A self contained breathing apparatus should be used when vapor concentrations are above permitted exposure limits.
Other Protective Information: Personal Protective Equipment in case of spill or leakage: Self contained (full faced) breathing apparatus (SCBA), chemical resistant gloves, chemical resistant boots and protective clothing, full body Tyvek suit.
Use only with adequate ventilation. Local exhaust ventilation is necessary for most applications.
Lethal concentrations (Methylene Chloride) may exist in areas with poor ventilation. Contact Besway Systems, Inc. (615) 865-8310 for further information regarding vapor concentrations in your work areas. Methylene Chloride monitoring badges are available and may be necessary to determine if your processes are below permitted exposure limits for Methylene Chloride.

Section 9, Physical and Chemical Properties

Physical State: Semi-paste
Appearance: Clear/white paste
Color: Colorless
Odor: Sweet ether like odor
pH: 9 – 10
Boiling Point: 104 F
Vapor Density: >1 (Air = 1)
Vapor pressure: < 300 mm Hg @ 20 C
Specific Gravity: 1.160 - 1.190
Percent Volatile: > 97 %
Flash Point: None to boiling point (104 F)

Section 10, Stability and Reactivity

Reactivity: None
Chemical Stability: Stable under normal conditions.
Hazardous Polymerization: Will not occur.
Conditions to Avoid: Contact with pure oxygen, alkali metals, open flames, electrical sparks and welding torches.
Incompatible Materials: Avoid contact with strong alkalies and strong oxidizing agents.
Hazardous Decomposition Products: None

Section 11, Toxicological Information

Acute Toxicity: LD50 Oral (rat) > 2,000 mg/kg
LC50 Inhalation (rat) 52,000 mg/m3
LD50 Dermal (rat) 2,000 mg/kg (OECD Test Guideline 402)
Skin corrosion/ irritation: Skin (rabbit). Result: Irritating to skin. -24 h
Reproductive Toxicity: No data available
Symptoms/Injuries after Inhalation: Drowsiness or dizziness.
Symptoms/Injuries after Eye Contact: Sever pain and stinging to the eyes.
Symptoms/Injuries after Ingestion: May cause damage to organs, liver, blood if ingested.
Other Information: Toxicological information determined using bridging principals from current raw material SDS information. IARC: 2B- Group 2B: Possibly carcinogenic to humans (Methylene Chloride)

Section 12, Ecological Information

Keep Out of Water Ways. Contain all spills and keep away from drains.
Toxicity to Fish Methylene Chloride: LC50 (fathead minnow) – 193 mg/l – 96 hr.
Persistence and degradability: No data available.
Bio accumulative potential: No data available.
Mobility in soil: No data available.

Section 13, Disposal

Dispose of in accordance with local, regional, national and international regulations.

Section 14, Transportation Information

UN Number (DOT): UN 2810
UN Number: UN 2810
Proper Shipping Name: Toxic Liquid, Organic, N.O.S. (Contains Methylene Chloride and Methanol)
DOT Classification: 6.1
Hazard Classification: Toxic
Hazard label: Toxic
Packing Group: PG III

Section 15, Regulatory Information

Materials Listed on the United States TSCA (Toxic Substance Control Act) Inventory.
California Prop 65. This product contains a chemical known to the State of California to cause cancer (Methylene Chloride). OSHA: Hazardous by definition of Hazard Communication Standard (29 CFR1910.1200).

Section 16, Other Information

Revision Date: April 24th 2015
Other Information: This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200.

This information is based on our knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not be construed as guaranteeing any specific property of the product.

SAFETY DATA SHEET

Turpentine

Section 1. Identification

GHS product identifier : Turpentine

Chemical name : Crude Sulphate Turpentine

Other means of identification : Spirit or Oil of Turpentine; Sulphate of Turpentine; Flammable Pulp Mill Liquid

Product type : Liquid.

Relevant identified uses of the substance or mixture and uses advised against

Product use : Raw turpentine is separated from condensed digester relief gases in the Kraft pulping process. The turpentine can be distilled and used in numerous products.

Area of application : Industrial applications.

Supplier/Manufacturer : Verso Corporation
6775 Lenox Center Court
Memphis, TN 38115
901-369-4100

e-mail address of person responsible for this SDS : thomas.willis@versoco.com

Emergency telephone number (with hours of operation) : 1-800-424-9300 (24-Hour) Chemtrec Customer Number: CCN212201

Section 2. Hazards identification

OSHA/HCS status : This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Classification of the substance or mixture :
H226 FLAMMABLE LIQUIDS - Category 3
H312 ACUTE TOXICITY (dermal) - Category 4
H331 ACUTE TOXICITY (inhalation) - Category 3
H315 SKIN IRRITATION - Category 2
H319 EYE IRRITATION - Category 2A
H317 SKIN SENSITIZATION - Category 1
H335 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3
H336 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3
H304 ASPIRATION HAZARD - Category 1

GHS label elements

Hazard pictograms :

Section 2. Hazards identification

Signal word : Danger

Hazard statements : H226 - Flammable liquid and vapor.
H331 - Toxic if inhaled.
H312 - Harmful in contact with skin.
H319 - Causes serious eye irritation.
H315 - Causes skin irritation.
H317 - May cause an allergic skin reaction.
H304 - May be fatal if swallowed and enters airways.
H335 - May cause respiratory irritation.
H336 - May cause drowsiness and dizziness.

Precautionary statements

Prevention : P280 - Wear protective gloves. Wear eye or face protection. Wear protective clothing.
P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P241 - Use explosion-proof electrical, ventilating, lighting and all material-handling equipment.
P242 - Use only non-sparking tools.
P243 - Take precautionary measures against static discharge.
P233 - Keep container tightly closed.
P271 - Use only outdoors or in a well-ventilated area.
P261 - Avoid breathing vapor.
P264 - Wash hands thoroughly after handling.
P272 (OSHA) - Contaminated work clothing must not be allowed out of the workplace.

Response : P304 + P340 + P311 - IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or physician.
P301 + P310 + P331 - IF SWALLOWED: Immediately call a POISON CENTER or physician. Do NOT induce vomiting.
P303 + P361 + P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.
P302 + P352 + P312 + P363 - IF ON SKIN: Wash with plenty of soap and water. Call a POISON CENTER or physician if you feel unwell. Wash contaminated clothing before reuse.
P333 + P313 - If skin irritation or rash occurs: Get medical attention.
P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337 + P313 - If eye irritation persists: Get medical attention.

Storage : P405 - Store locked up.
P403 - Store in a well-ventilated place.
P235 - Keep cool.

Disposal : P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.

Supplemental label elements : Eliminate sources of ignition. Avoid spark promoters. Ground/bond container and receiving equipment. These alone may be insufficient to remove static electricity. Avoid contact with skin and clothing. Wash thoroughly after handling.

Hazards not otherwise classified : Static accumulating flammable liquid can become electrostatically charged even in bonded and grounded equipment. Sparks may ignite liquid and vapor may cause flash fire or explosion. Defatting to the skin. Prolonged or repeated contact may dry skin and cause irritation.

Section 3. Composition/information on ingredients

Substance/mixture : Substance

Chemical name : Crude Sulphate Turpentine

Other means of identification : Spirit or Oil of Turpentine; Sulphate of Turpentine; Flammable Pulp Mill Liquid

CAS number/other identifiers

CAS number : 8006-64-2

Product code : Not available.

Ingredient name	Other names	%	CAS number
Crude Sulphate Turpentine	-	100	8006-64-2

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health and hence require reporting in this section.

Section 4. First aid measures

Description of necessary first aid measures

Eye contact : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.

Inhalation : Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention. If necessary, call a poison center or physician. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Skin contact : Wash skin thoroughly with soap and water or use recognized skin cleanser. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Get medical attention. If necessary, call a poison center or physician. In the event of any complaints or symptoms, avoid further exposure. Wash clothing before reuse. Clean shoes thoroughly before reuse.

Ingestion : Get medical attention immediately. Call a poison center or physician. Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Aspiration hazard if swallowed. Can enter lungs and cause damage. Do not induce vomiting. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Most important symptoms/effects, acute and delayed

Potential acute health effects

Eye contact : Causes serious eye irritation.

Section 4. First aid measures

Inhalation : Toxic if inhaled. Can cause central nervous system (CNS) depression. May cause drowsiness and dizziness. May cause respiratory irritation.

Skin contact : Harmful in contact with skin. Causes skin irritation. Defatting to the skin. May cause an allergic skin reaction.

Ingestion : Can cause central nervous system (CNS) depression. May be fatal if swallowed and enters airways.

Over-exposure signs/symptoms

Eye contact : Adverse symptoms may include the following:
pain or irritation
watering
redness

Inhalation : Adverse symptoms may include the following:
respiratory tract irritation
coughing
nausea or vomiting
headache
drowsiness/fatigue
dizziness/vertigo
unconsciousness

Skin contact : Adverse symptoms may include the following:
irritation
redness
dryness
cracking

Ingestion : Adverse symptoms may include the following:
nausea or vomiting

Indication of immediate medical attention and special treatment needed, if necessary

Notes to physician : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

Specific treatments : No specific treatment.

Protection of first-aiders : No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media : Use dry chemical, CO_2, water spray (fog) or foam.

Unsuitable extinguishing media : Do not use water jet.

Section 5. Fire-fighting measures

Specific hazards arising from the chemical : Flammable liquid and vapor. This product is a poor conductor of electricity and can become electrostatically charged. If sufficient charge is accumulated, ignition of flammable mixtures can occur. To reduce potential for static discharge, use proper bonding and grounding procedures. This liquid may accumulate static electricity when filling properly grounded containers. Static accumulation may be significantly increased by the presence of small quantities of water or other contaminants. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. The vapor/gas is heavier than air and will spread along the ground. Vapors may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back. Runoff to sewer may create fire or explosion hazard.

Hazardous thermal decomposition products : Decomposition products may include the following materials:
carbon dioxide
carbon monoxide
sulfur oxides
hydrogen sulfide
Mercaptans

Special protective actions for fire-fighters : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

Special protective equipment for fire-fighters : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Do not breathe vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

For emergency responders : If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

Environmental precautions : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Methods and materials for containment and cleaning up

Small spill : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

Section 6. Accidental release measures

Large spill : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Section 7. Handling and storage

Precautions for safe handling

Protective measures : Put on appropriate personal protective equipment (see Section 8). Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not swallow. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Take precautionary measures against electrostatic discharges. Empty containers retain product residue and can be hazardous. Do not reuse container. Handling operations that can promote accumulation of static charges include but are not limited to: mixing, filtering, pumping at high flow rates, splash filling, creating mists or sprays, tank and container filling, tank cleaning, sampling, gauging, switch loading, vacuum truck operations. Restrict flow velocity according to API 2003 (2008), NFPA 77 (2007), and Laurence Britton, "Avoiding Static Ignition Hazards in Chemical Operations". To reduce potential for static discharge, ensure that all equipment is properly grounded and bonded and meets appropriate electrical classification requirements.

Advice on general occupational hygiene : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

Conditions for safe storage, including any incompatibilities : Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

Section 8. Exposure controls/personal protection

Ingredient name	Exposure limits
Crude Sulphate Turpentine	**OSHA PEL 1989 (United States, 3/1989).** TWA: 100 ppm 8 hours. TWA: 560 mg/m³ 8 hours. **NIOSH REL (United States, 4/2013).** TWA: 100 ppm 10 hours. TWA: 560 mg/m³ 10 hours. **OSHA PEL (United States, 2/2013).** TWA: 100 ppm 8 hours. TWA: 560 mg/m³ 8 hours. **ACGIH TLV (United States, 6/2013). Skin sensitizer.** TWA: 20 ppm 8 hours.

Appropriate engineering controls : Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

Environmental exposure controls : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Individual protection measures

Hygiene measures : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles.

Skin protection

Hand protection : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated. Recommended: nitrile, polyvinyl alcohol (PVA).

Body protection : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. When there is a risk of ignition from static electricity, wear anti-static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves.

Section 8. Exposure controls/personal protection

Other skin protection : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Respiratory protection : Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Section 9. Physical and chemical properties

Appearance

Physical state : Liquid. [Watery liquid.]

Color : Colorless to light yellow. Brown.

Odor : Pungent. Rotten eggs.

Odor threshold : 100 ppm

pH : Not available.

Melting point : -60 to -50°C (-76 to -58°F)

Boiling point : 149 to 180°C (300.2 to 356°F)

Flash point : Closed cup: 31.7°C (89.1°F)

Evaporation rate : Not available.

Flammability (solid, gas) : Not applicable.

Lower and upper explosive (flammable) limits : Lower: 0.8%
Upper: 6%

Vapor pressure : 0.53 kPa (4 mm Hg) [room temperature]

Vapor density : 4.8 [Air = 1]

Relative density : 0.9

Solubility : Insoluble in the following materials: Water.

Solubility in water : 0.351 g/l

Partition coefficient: n-octanol/water : Not available.

Auto-ignition temperature : 253°C (487.4°F)

Decomposition temperature : Not available.

SADT : Not available.

Viscosity : Not available.

Density : 0.86 g/cm³ [25°C]

Section 10. Stability and reactivity

Reactivity : No specific test data related to reactivity available for this product or its ingredients.

Chemical stability : The product is stable.

Possibility of hazardous reactions : Under normal conditions of storage and use, hazardous reactions will not occur.

Under normal conditions of storage and use, hazardous polymerization will not occur.

Section 10. Stability and reactivity

Conditions to avoid : Avoid all possible sources of ignition (spark or flame). Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition. Do not allow vapor to accumulate in low or confined areas.

Incompatible materials : Reactive or incompatible with the following materials:
oxidizing materials; acids
Reacts violently with chromic anhydride, chromium trioxide, calcium hypochlorite, chlorine, chromyl chloride, hexachloromelamine, trichloromelamine, and stannic chloride.

Hazardous decomposition products : Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Crude Sulphate Turpentine	LC50 Inhalation Dusts and mists LC50 Inhalation Gas. LC50 Inhalation Vapor LD50 Oral	Rat Rat Rat Rat	19900 mg/m³ 2466 ppm 13700 mg/m³ 3956 mg/kg	1 hours 4 hours 4 hours -

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
Crude Sulphate Turpentine	Skin - Severe irritant	Rabbit	-	500 microliters	-

Sensitization

Not available.

Mutagenicity

Conclusion/Summary : Not available.

Carcinogenicity

Conclusion/Summary : Not available.

Reproductive toxicity

Conclusion/Summary : Not available.

Teratogenicity

Conclusion/Summary : Not available.

Specific target organ toxicity (single exposure)

Name	Category	Route of exposure	Target organs
Crude Sulphate Turpentine	Category 3	Not applicable.	Respiratory tract irritation and Narcotic effects

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

Section 11. Toxicological information

Name	Result
Crude Sulphate Turpentine	ASPIRATION HAZARD - Category 1

Information on the likely routes of exposure : Not available.

Potential acute health effects

Eye contact : Causes serious eye irritation.

Inhalation : Toxic if inhaled. Can cause central nervous system (CNS) depression. May cause drowsiness and dizziness. May cause respiratory irritation.

Skin contact : Harmful in contact with skin. Causes skin irritation. Defatting to the skin. May cause an allergic skin reaction.

Ingestion : Can cause central nervous system (CNS) depression. May be fatal if swallowed and enters airways.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact : Adverse symptoms may include the following:
pain or irritation
watering
redness

Inhalation : Adverse symptoms may include the following:
respiratory tract irritation
coughing
nausea or vomiting
headache
drowsiness/fatigue
dizziness/vertigo
unconsciousness

Skin contact : Adverse symptoms may include the following:
irritation
redness
dryness
cracking

Ingestion : Adverse symptoms may include the following:
nausea or vomiting

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Long term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Potential chronic health effects

Not available.

Section 11. Toxicological information

General : Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/or dermatitis. Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.

Carcinogenicity : No known significant effects or critical hazards.

Mutagenicity : No known significant effects or critical hazards.

Teratogenicity : No known significant effects or critical hazards.

Developmental effects : No known significant effects or critical hazards.

Fertility effects : No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

Not available.

Section 12. Ecological information

Toxicity

Not available.

Persistence and degradability

Not available.

Bioaccumulative potential

Not available.

Mobility in soil

Soil/water partition coefficient (K_{OC}) : Not available.

Other adverse effects : No known significant effects or critical hazards.

Section 13. Disposal considerations

Disposal methods : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Vapor from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport information

	DOT Classification	IMDG	IATA
UN number	UN1993	UN1993	UN1993
UN proper shipping name	Flammable liquids, n.o.s. (Crude Sulphate Turpentine)	FLAMMABLE LIQUID, N.O.S. (Crude Sulphate Turpentine)	Flammable liquid, n.o.s. (Crude Sulphate Turpentine)
Transport hazard class(es)	3 	3 	3 
Packing group	III	III	III
Environmental hazards	No.	Yes.	No.
Additional information	**Limited quantity** Yes. **Packaging instruction** **Passenger aircraft** Quantity limitation: 60 L **Cargo aircraft** Quantity limitation: 220 L **Special provisions** B1, B52, IB3, T4, TP1, TP29	The marine pollutant mark is not required when transported in sizes of ≤5 L or ≤5 kg. **Emergency schedules (EmS)** F-E, _S-E_ **Special provisions** 223, 274, 955	The environmentally hazardous substance mark may appear if required by other transportation regulations. **Passenger and Cargo Aircraft** Quantity limitation: 60 L Packaging instructions: 355 **Cargo Aircraft Only**Quantity limitation: 220 L Packaging instructions: 366 **Limited Quantities - Passenger Aircraft**Quantity limitation: 10 L Packaging instructions: Y344 **Special provisions** A3

Special precautions for user : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code : Not available.

Section 15. Regulatory information

U.S. Federal regulations : **United States inventory (TSCA 8b):** This material is listed or exempted.

Clean Air Act Section 112 (b) Hazardous Air Pollutants (HAPs) : Not listed

Clean Air Act Section 602 Class I Substances : Not listed

Section 15. Regulatory information

Clean Air Act Section 602 Class II Substances : Not listed

DEA List I Chemicals (Precursor Chemicals) : Not listed

DEA List II Chemicals (Essential Chemicals) : Not listed

SARA 302/304

Composition/information on ingredients

No products were found.

SARA 304 RQ : Not applicable.

SARA 311/312

Classification : Fire hazard
Immediate (acute) health hazard

Composition/information on ingredients

Name	%	Fire hazard	Sudden release of pressure	Reactive	Immediate (acute) health hazard	Delayed (chronic) health hazard
Crude Sulphate Turpentine	100	Yes.	No.	No.	Yes.	No.

SARA 313

Not applicable.

State regulations

Massachusetts : This material is listed.

New York : This material is not listed.

New Jersey : This material is listed.

Pennsylvania : This material is not listed.

California Prop. 65

None of the components are listed.

Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

Montreal Protocol (Annexes A, B, C, E)

Not listed.

Stockholm Convention on Persistent Organic Pollutants

Not listed.

Rotterdam Convention on Prior Inform Consent (PIC)

Not listed.

UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

Section 16. Other information

Hazardous Material Information System (U.S.A.)

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks Although HMIS® ratings are not required on SDSs under 29 CFR 1910. 1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered mark of the National Paint & Coatings Association (NPCA). HMIS® materials may be purchased exclusively from J. J. Keller (800) 327-6868.

The customer is responsible for determining the PPE code for this material.

National Fire Protection Association (U.S.A.)

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Copyright ©2001, National Fire Protection Association, Quincy, MA 02269. This warning system is intended to be interpreted and applied only by properly trained individuals to identify fire, health and reactivity hazards of chemicals. The user is referred to certain limited number of chemicals with recommended classifications in NFPA 49 and NFPA 325, which would be used as a guideline only. Whether the chemicals are classified by NFPA or not, anyone using the 704 systems to classify chemicals does so at their own risk.

Procedure used to derive the classification

Classification	Justification
Flam. Liq. 3, H226	On basis of test data
Acute Tox. 4, H312	Expert judgment
Acute Tox. 3, H331	On basis of test data
Skin Irrit. 2, H315	Expert judgment
Eye Irrit. 2A, H319	Expert judgment
Skin Sens. 1, H317	Expert judgment
STOT SE 3, H335	Expert judgment
STOT SE 3, H336	Expert judgment
Asp. Tox. 1, H304	Expert judgment

History

Date of issue/Date of revision : 07/13/2015

Date of previous issue : No previous validation

Version : 1

Prepared by : IHS

Section 16. Other information

Key to abbreviations : ATE = Acute Toxicity Estimate
BCF = Bioconcentration Factor
GHS = Globally Harmonized System of Classification and Labelling of Chemicals
IATA = International Air Transport Association
IBC = Intermediate Bulk Container
IMDG = International Maritime Dangerous Goods
LogPow = logarithm of the octanol/water partition coefficient
MARPOL 73/78 = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
UN = United Nations

References : HCS (U.S.A.)- Hazard Communication Standard
International transport regulations

Indicates information that has changed from previously issued version.

Notice to reader

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