

# ROOFLABS SAFETY DATA SHEET

POLY-SEAL Topcoat Feb 18, 2015

# SECTION 1) CHEMICAL PRODUCT AND SUPPLIER'S IDENTIFICATION

Product ID: 20-8081FF00122 **Product Name:** POLY-SEAL Topcoat

**Date Printed: Revision Date:** 

Version: Supersedes Date: 1.0 N.A.

Distributor: VTCR Roofing

Address: PO Box 260423, San Juan PR 00926

**Emergency Phone:** Chemtrec:800-424-9300 (account:CCN1217) OR International:703-527-3887 (account:CCN1217)

Information Phone Number: (787) 675-2856

Product/Recommended Uses: For Further Information, Refer to the Product Technical Data Sheet.

# **SECTION 2) HAZARDS IDENTIFICATION**

#### Classification:

Specific Target Organ Toxicity - Repeated Exposure - Category 2

Aspiration Hazard - Category 1

Skin Irritation - Category 3

Eye Irritation - Category 2A

Respiratory Sensitizer (Solid/Liquid) - Category 1

Skin Sensitizer - Category 1

Germ Cell Mutagenicity - Category 1B

Carcinogenicity - Category 1B

Flammable Liquids Category 3

# Pictograms:







# Signal Word:

Danger

# Hazardous Statements - Physical:

H226 - Flammable liquid and vapor

# Hazardous Statements - Health:

H373 - May cause damage to organs through prolonged or repeated exposure.

H304 - May be fatal if swallowed and enters airways

H316 - Causes mild skin irritation

H319 - Causes serious eye irritation

H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled

H317 - May cause an allergic skin reaction

H340 - May cause genetic defects (state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard)

H350 - May cause cancer (state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard)

# **Precautionary Statements - General:**

- P101 If medical advice is needed, have product container or label at hand.
- P102 Keep out of reach of children.
- P103 Read label before use.

# **Precautionary Statements - Prevention:**

- P260 Do not breathe dust/fume/gas/mist/vapors/spray.
- P264 Wash thoroughly after handling.
- P280 Wear protective gloves/protective clothing/eye protection/face protection.
- P261 Avoid breathing dust/fume/gas/mist/vapors/spray.
- P284 [In case of inadequate ventilation] wear respiratory protection.
- P272 Contaminated work clothing should not be allowed out of the workplace.
- P201 Obtain special instructions before use.
- P202 Do not handle until all safety precautions have been read and understood.
- P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
- P233 Keep container tightly closed.
- P240 Ground/bond container and receiving equipment.
- P241 Use explosion-proof [electrical/ventilating/lighting/...] equipment.
- P242 Use only non-sparking tools.
- P243 Take action to prevent static discharges.

### **Precautionary Statements - Response:**

- P314 Get Medical advice/attention if you feel unwell.
- P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor.
- P331 Do NOT induce vomiting.
- P332 + P313 If skin irritation occurs: Get medical advice/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 advice/attention.
- P304 + P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
- P342 + P311 If experiencing respiratory symptoms: Call a POISON CENTER/doctor.
- P302 + P352 IF ON SKIN: Wash with plenty of water.
- P333 + P313 If skin irritation or a rash occurs: Get medical advice/attention.
- P321 Specific treatment (see section 4 on this SDS).
- P362 + P364 Take off contaminated clothing. And wash it before reuse.
- P308 + P313 IF exposed or concerned: Get medical advice/attention.
- P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].
- P370 + P378 In case of fire: Use dry chemical, carbon dioxide, foam to extinguish.
- For detailed information, see Section-5 (Fire Fighting Measures)

# **Precautionary Statements - Storage:**

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

# Precautionary Statements - Disposal:

P501 - Dispose of contents/ container to an approved waste disposal plant.

# **SECTION 3) COMPOSITION / INFORMATION ON INGREDIENTS**

CAS	Chemical Name	% By Weight
0053880-05-0	POLYURETHANE PREPOLYMER	34% - 63%
0064742-95-6	AROMATIC HYDROCARBON MIXTURE >C9	14% - 25%

0013463-67-7	TITANIUM DIOXIDE	9% - 16%
0014808-60-7	SILICA, CRYSTALLINE	8% - 15%
0000123-86-4	N-BUTYL ACETATE	1.3% - 2%
0001333-86-4	CARBON BLACK	0.6% - 1.1%
0004098-71-9	ISOPHORONE DIISOCYANATE	0.1% - 0.2%

# **SECTION 4) FIRST-AID MEASURES**

#### Inhalation:

Remove source of exposure or move person to fresh air and keep comfortable for breathing. If experiencing respiratory symptoms: Call a POISON CENTER/doctor. If breathing is difficult, trained personnel should administer emergency oxygen if advised to do so by the POISON CENTER/doctor.

If exposed/feel unwell/concerned: Call a POISON CENTER/doctor.

Eliminate all ignition sources if safe to do so.

#### **Skin Contact:**

Take off contaminated clothing, shoes and leather goods (e.g. watchbands, belts). Gently blot or brush away excess product. Wash with plenty of lukewarm, gently flowing water for a duration of 15-20 minutes. If skin irritation or rash occurs: Get medical advice/attention. Wash contaminated clothing before re-use or discard.

IF exposed or concerned: Get medical advice/attention.

# **Eye Contact:**

Avoid direct contact. Wear chemical protective gloves, if necessary.

Rinse eyes cautiously with lukewarm, gently flowing water for several minutes, while holding the eyelids open. Remove contact lenses, if present and easy to do. Continue rinsing for 15-20 minutes. Take care not to rinse contaminated water into the unaffected eye or onto the face. If eye irritation persists: Get medical advice/attention.

# Ingestion:

Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER/doctor. If vomiting occurs naturally, lie on your side, in the recovery position.

IF exposed or concerned: Get medical advice/attention.

# **SECTION 5) FIRE-FIGHTING MEASURES**

# Suitable Extinguishing Media:

Dry chemical, foam, carbon dioxide is recommended. Water spray is recommended to cool or protect exposed materials or structures. Carbon dioxide can displace oxygen. Use caution when applying carbon dioxide in confined spaces. Simultaneous use of foam and water on the same surface is to be avoided as water destroys the foam. Sand or earth may be used for small fires only.

# **Unsuitable Extinguishing Media:**

If water is used, use very large quantities of cold water. The reaction between water and hot isocyanate may be vigorous.

### Specific Hazards in Case of Fire:

Vapors may accumulate and travel to ignition sources distant from the handling site; flash fire can occur.

Excessive pressure or temperature may cause explosive rupture of containers.

Water contamination will produce carbon dioxide. Do not reseal contaminated containers as pressure buildup may rupture them.

# Fire-fighting Procedures:

Isolate immediate hazard area and keep unauthorized personnel out. Stop spill/release if it can be done safely. Move undamaged containers from immediate hazard area if it can be done safely. Water spray may be useful in minimizing or dispersing vapors and to protect personnel. Water may be ineffective but can be used to cool containers exposed to heat or flame. Caution should be exercised when using water or foam as frothing may occur, especially if sprayed into containers of hot, burning liquid.

Dispose of fire debris and contaminated extinguishing water in accordance with official regulations.

# **Special Protective Actions:**

Wear NIOSH approved self-contained breathing apparatus in positive pressure mode with full-face piece. Boots, gloves (neoprene), googles, and full protective clothing are also required.

Care should always be exercised in dust/mist areas.

# **SECTION 6) ACCIDENTAL RELEASE MEASURES**

#### **Emergency Procedure:**

ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area).

Do not touch or walk through spilled material.

Isolate hazard area and keep unnecessary people away. Remove all possible sources of ignition in the surrounding area. Notify authorities if any exposure to the general public or the environment occurs or is likely to occur.

If spilled material is cleaned up using a regulated solvent, the resulting waste mixture may be regulated.

# **Recommended Equipment:**

Positive pressure, full-face piece self-contained breathing apparatus(SCBA), or positive pressure supplied air respirator with escape SCBA (NIOSH approved).

#### **Personal Precautions:**

Avoid breathing vapors. Avoid contact with skin, eyes or clothing. Do not touch damaged containers or spilled materials unless wearing appropriate protective clothing.

# **Environmental Precautions:**

Stop spill/release if it can be done safely. Prevent spilled material from entering sewers, storm drains, other unauthorized drainage systems and natural waterways by using sand, earth, or other appropriate barriers.

### Methods and Materials for Containment and Cleaning up:

Cover container, but do not seal, and remove from work area. Prepare a decontamination solution of 2.0% liquid detergent and 3-8% concentrated ammonium hydroxide in water (5-10% sodium carbonate may be substituted for the ammonium hydroxide). Follow the precautions on the supplier's safety data sheets.

Treat the spill area with the decontamination solution, using about 10 parts of the solution for each part of the spill, and allow it to react for at least 15 minutes. Carbon dioxide will be evolved, leaving insoluble polyureas. Residues from spill cleanup, even when treated as described may continue to be regulated under provisions of RCRA and require storage and disposal as hazardous waste.

Slowly stir the isocyanate waste into the decontamination solution described above. Let stand for 48 hours, allowing the evolved carbon dioxide to vent away, residues may still be subject to RCRA storage and disposal requirements. Dispose off in compliance with all relevant local, state, and federal laws and regulations regarding treatment.

# **SECTION 7) HANDLING AND STORAGE**

### General:

Wash hands after use.

Do not get in eyes, on skin or on clothing.

Do not breathe vapors or mists.

Use good personal hygiene practices.

Eating, drinking and smoking in work areas is prohibited.

Remove contaminated clothing and protective equipment before entering eating areas.

# **Ventilation Requirements:**

Use only with adequate ventilation to control air contaminants to their exposure limits. The use of local ventilation is recommended to control emissions near the source.

# **Storage Room Requirements:**

Keep container(s) tightly closed and properly labeled. Store in cool, dry, well-ventilated areas away from heat, direct sunlight, strong oxidizers and any incompatibilities. Store in approved containers and protect against physical damage. Keep containers securely sealed when not in use. Indoor storage should meet OSHA standards and appropriate fire codes. Containers that have been opened must be carefully resealed to prevent leakage. Empty container retain residue and may be dangerous.

Use non-sparking ventilation systems, approved explosion-proof equipment and intrinsically safe electrical systems in areas where this product is used and stored.

Ground and bond containers and receiving equipment. Avoid static electricity by grounding.

Do not cut, drill, grind, weld, or perform similar operations on or near containers. Do not pressurize containers to empty them. Ground all structures, transfer containers and equipment to conform to the national electrical code. Use procedures that prevent static electrical sparks. Static electricity may accumulate and create a fire hazard.

# **SECTION 8) EXPOSURE CONTROLS/PERSONAL PROTECTION**

# **Eye Protection:**

Wear eye protection with side shields or goggles. Wear indirect-vent, impact and splash resistant goggles when working with liquids. If additional protection is needed for entire face, use in combination with a face shield.

# **Skin Protection:**

Use of gloves approved to relevant standards made from the following materials may provide suitable chemical protection: PVC, neoprene or nitrile rubber gloves. Suitability and durability of a glove is dependent on usage, e.g. frequency and duration of contact, chemical resistance of glove material, glove thickness, dexterity. Always seek advice from glove suppliers. Contaminated gloves should be replaced. Use of an apron and over- boots of chemically impervious materials such as neoprene or nitrile rubber is recommended to avoid skin sensitization. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace. Launder soiled clothes or properly disposed of contaminated material, which cannot be decontaminated.

Depending on conditions of use, additional protection may be required such as apron, arm covers, or full body suit. Wash contaminated clothing before re-wearing.

# **Respiratory Protection:**

If airborne concentrations exceed or are expected to exceed the TLV, use MSHA/NIOSH approved positive pressure supplied pressure supplied air respiratory with a full face piece or an air supplied hood. For emergencies, use a positive pressure self-contained breathing apparatus. Air purifying (cartridge type) respirators are not approved for protection against isocyanates.

# **Appropriate Engineering Controls:**

Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective threshold limit value.

Chemical Name	OSHA TWA (ppm)	OSHA TWA (mg/m3)	OSHA STEL (ppm)	OSHA STEL (mg/m3)	OSHA Tables (Z1, Z2, Z3)	OSHA Skin designatic	NIOSH TWA (ppm)	NIOSH TWA (mg/m3)	NIOSH STEL (ppm)	NIOSH STEL (mg/m3)	NIOSH Carcinoge
AROMATIC HYDROCARBON MIXTURE >C9	500	2000			1						
CARBON BLACK		3.5			1			3.5a			1
ISOPHORONE DIISOCYANATE							0.005	0.045	0.02	0.180	
N-BUTYL ACETATE	150	710			1		150	710	200	950	
SILICA, CRYSTALLINE	a	[10 mg/m: percent SiO2+2 / 250 percent SiO2+5 mppcf]; [3 mg/m3 percent SiO2+2];			[1,3]; [3];			0.05e			1
TITANIUM DIOXIDE		15			1		b				1

Chemical Name	ACGIH TWA (ppm)	ACGIH TWA (mg/m3)	ACGIH STEL (ppm)	ACGIH STEL (mg/m3)
AROMATIC HYDROCARBON MIXTURE >C9				
CARBON BLACK		3 (I)		
ISOPHORONE DIISOCYANATE	0.005	0.045		
N-BUTYL ACETATE	150	713	200	950
SILICA, CRYSTALLINE		0.025 (R)		
TITANIUM DIOXIDE		10		

<sup>(</sup>I) - Inhalable fraction

# **SECTION 9) PHYSICAL AND CHEMICAL PROPERTIES**

# **Physical and Chemical Properties**

Density 9.69 lb/gal Specific Gravity 1.16 VOC Regulatory 1.88 lb/gal

VOC Part A & B Combined N.A.

Appearance Pigmented Thin Liquid

Odor Threshold N.A.
Odor Description Aromatic
pH N.A.

Water Solubility Reacts with Water

Flammability N/A
Flash Point Symbol N.A.

Flash Point 45 °C
Viscosity N.A.
Lower Explosion Level N.A.
Upper Explosion Level N.A.
Vapor Pressure N.A.

Vapor Density Heavier than air

Freezing Point N.A.

Melting Point N.A.

Low Boiling Point 120 °C

High Boiling Point N.A.

Auto Ignition Temp N.A.

Decomposition Pt N.A.

Evaporation Rate Slower than ether

Coefficient Water/Oil N.A.

# **SECTION 10) STABILITY AND REACTIVITY**

### Stability:

Material is stable at standard temperature and pressure.

#### **Conditions to Avoid:**

Heat, high temperature, open flame, sparks, and moisture. Contact with incompatible materials in a closed system will cause liberation of carbon dioxide and buildup of pressure.

# **Hazardous Reactions/Polymerization:**

Will not occur under normal conditions but under high temperatures in the presence of alkalis, tertiary amines, and metal compounds will accelerate polymerization. Possible evolution of carbon dioxide gas may rupture closed containers.

#### **Incompatible Materials:**

This product will react with any material containing active hydrogens, such as water, alcohol, ammonia, amines, alkalis and acids, the reaction with water is slow under 50°C, but is accelerated at higher temperature and in the presence of alkalis, tertiary amines, and metal compounds. Some reactions can be violent. Material can react with strong oxidizing agents.

# **Hazardous Decomposition Products:**

Carbon dioxide, carbon monoxide, nitrogen oxides, trace amounts of hydrogen cyanide and unidentified organic compounds may be formed during combustion.

# **SECTION 11) TOXICOLOGICAL INFORMATION**

# Skin Corrosion/Irritation:

Isocyanates react with skin protein and moisture and can cause irritation. Prolonged contact can cause reddening, swelling, rash, scaling, blistering, and, in some cases, skin sensitization. Individuals who have developed a skin sensitization can develop these symptoms as a result of contact with very small amounts of liquid material or as a result of exposure to vapor.

Causes mild skin irritation

#### Serious Eve Damage/Irritation:

Liquid, aerosols or vapors are severely irritating and can cause pain, tearing, reddening and swelling. Prolonged vapor contact may cause conjunctivitis. Any level of contact should not be left untreated.

Causes serious eye irritation

# Carcinogenicity:

May cause cancer (state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard)

# Respiratory/Skin Sensitization:

May cause allergy or asthma symptoms or breathing difficulties if inhaled

May cause an allergic skin reaction

### **Germ Cell Mutagenicity:**

May cause genetic defects (state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard)

# **Reproductive Toxicity:**

No data available

### **Specific Target Organ Toxicity - Single Exposure:**

No data available

# Specific Target Organ Toxicity - Repeated Exposure:

May cause damage to organs through prolonged or repeated exposure.

#### **Aspiration Hazard:**

May be fatal if swallowed and enters airways

# **Acute Toxicity:**

No data available

0004098-71-9 ISOPHORONE DIISOCYANATE

LC50 (rat): 123-160 mg/m3 (13.6-17.6 ppm) (4-hour exposure) (aerosol) (1,2)

LD50 (oral, male rat): greater than 2,500 mg/kg (1) LD50 (oral, male mouse): greater than 2,500 mg/kg (1)

LD50 (dermal, male rat): approx. 1,000 mg/kg (4-hour exposure); approx. 500 mg/kg (4-day exposure) (1)

0001333-86-4 CARBON BLACK

LC50 (rat): 6750 mg/m3 (4-hour exposure); cited as 27000 mg/m3 (27 mg/L) (1-hour exposure) (3)

0000123-86-4 N-BUTYL ACETATE

LC50 (rat): 1802 mg/m3; 4-hour exposure (aerosol)(9) Note: A lower LC50 (aerosol) value of 760 mg/m3 (160 ppm); 4-hour exposure has been reported (11.27) Extensive research has failed to confirm this value. The sample of n-butyl acetate tested wa

LD50 (oral, rat): 10770 mg/kg (12, unconfirmed)

LD50 (oral, mouse): 7100 mg/kg (5) LD50 (oral, rabbit): 7400 mg/kg (cited as 64 millimols/kg) (13) LD50 (dermal, rabbit): Greater than 5000 mg/kg (3, unconfirmed)

# **Potential Health Effects - Miscellaneous**

0000123-86-4 N-BUTYL ACETATE

May cause abnormal liver function. The following medical conditions may be aggravated by exposure: respiratory system. Tests for embryotoxic activity in animals has been inconclusive. Rats exposed to very high airborne levels have exhibited high frequency hearing deficits. The significance of this to man is unknown. Has been toxic to the fetus in laboratory animals at doses that are toxic to the mother.

0001333-86-4 CARBON BLACK

Is an IARC, NTP or OSHA carcinogen. Has shown carcinogenic activity in laboratory animals at high doses. Significance to man is unknown. The following medical conditions may be aggravated by exposure: asthma, respiratory disease. WARNING: This chemical is known to the State of California to cause cancer.

0013463-67-7 TITANIUM DIOXIDE

Is an IARC, NTP or OSHA carcinogen. In a lifetime inhalation test, lung cancers were found in some rats exposed to 250 mg/m3 respirable titanium dust. Analysis of the titanium dioxide concentrations in the rat?s lungs showed that the lung clearance mechanism was overwhelmed and that the results at the massive 250 mg/m3 level are not relevant to the workplace.?Results of a DuPont epidemiology study showed that employees who had been exposed to Titanium Dioxide were at no greater risk of developing lung cancer than were employees who had not been exposed to Titanium dioxide. No pulmonary fibrosis was found in any of the employees and no association was observed between Titanium dioxide exposure and chronic respiratory disease or xray abnormalities. Based on the results of this study DuPont concludes that titanium dioxide will not cause lung cancer or chronic respiratory disease in humans at concentrations experienced in the workplace.?

0014808-60-7 SILICA, CRYSTALLINE

Is an IARC, NTP or OSHA carcinogen. Repeated overexposure to crystalline silica may lead to x-ray changes and chronic lung disease. Inhalation of high dust concentrations may cause: breathing difficulties, lung injury. WARNING: This chemical is known to the State of California to cause cancer.

0064742-95-6 AROMATIC HYDROCARBON MIXTURE >C9

The following medical conditions may be aggravated by exposure: skin disorders. Laboratory studies with rats have shown that petroleum distillates can cause kidney damage and kidney or liver tumors. These effects were not seen in similar studies with guinea pigs, dogs, or monkeys. Several studies evaluating petroleum workers have not shown a significant increase of kidney damage or an increase in kidney or liver tumors.

# **Chronic Exposure**

0001333-86-4 CARBON BLACK

CARCINOGENIC EFFECTS: In 1996, the IARC reevaluated Carbon Black as a Group 2B carcinogen. This evaluation is given to carbon black for which there is inadequate human evidence, but sufficient animal evidence.

Prolonged inhalation of Carbon black can result in lung disease. Symptoms include coughing, shortness of breath, wheezing and reduced pulmonary function.

0014808-60-7 SILICA, CRYSTALLINE

Prolonged inhalation of respirable crystalline silica dust can result in lung disease (i.e. silicosis and/or lung cancer). Symptoms include coughing, shortness of breath, wheezing and reduced pulmonary function.

# **SECTION 12) ECOLOGICAL INFORMATION**

### Toxicity:

No data available.

### Other Adverse Effects:

No data available.

#### **Bio-accumulative Potential**

0001333-86-4 CARBON BLACK

A relevant bioaccumulation potential of carbon black is not expected based on its insolubility in organic solvents and in water. Furthermore, since the aggregate diameter of carbon black varies between 80 nm and 810 nm, bioaccumulation of particulate carbon black is not likely oweing to the large diameter of the solid aggregate particles.

### Persistence and Degradability

0001333-86-4 CARBON BLACK

Carbon Black's insolubility in water results in it not being biodegradable in any medium or by biota. It is considered persistent in the natural environment.

# **SECTION 13) DISPOSAL CONSIDERATIONS**

# Waste Disposal:

Under RCRA, it is the responsibility of the user of the product, to determine a the time of disposal whether the product meets RCRA criteria for hazardous waste. Waste management should be in full compliance with federal, state, and local laws.

Empty containers retain product residue which may exhibit hazards of material, therefore do not pressurize, cut, glaze, weld or use for any other purposes. Return drums to reclamation centers for proper cleaning and reuse.

# **SECTION 14) TRANSPORT INFORMATION**

# **U.S. DOT Information:**

Not Regulated

# **IMDG Information:**

UN/NA #: 1263

Shipping Name: PAINT

Hazard Class: 3 Packing Group: III Placard: Flammable Liquid Marine Pollutant: No data available

# **IATA Information:**

UN/NA #: 1263 Shipping Name: PAINT Hazard Class: 3 Packing Group: III

Placard: Flammable Liquid

# **SECTION 15) REGULATORY INFORMATION**

CAS	Chemical Name	% By Weight	Regulation List
0053880-05-0	POLYURETHANE PREPOLYMER	34% - 63%	DSL,SARA312,TSCA
0064742-95-6	AROMATIC HYDROCARBON MIXTURE >C9	14% - 25%	DSL,SARA312,VOC,TSCA
0013463-67-7	TITANIUM DIOXIDE	9% - 16%	DSL,SARA312,TSCA,California Proposition 65
0014808-60-7	SILICA, CRYSTALLINE	8% - 15%	DSL,SARA312,TSCA,California Proposition 65
0000123-86-4	N-BUTYL ACETATE	1.3% - 2%	DSL,CERCLA,SARA312,VOC,TSCA
0001333-86-4	CARBON BLACK	0.6% - 1.1%	DSL,SARA312,TSCA,California Proposition 65

0004098-71-9	ISOPHORONE	0.1% - 0.2% DSL,SARA312,SARA313,VOC,TSCA
	DIISOCYANATE	

# **SECTION 16) OTHER INFORMATION**

# **OTHER INFORMATION:**

\* There are points of differences between OSHA GHS and UN GHS. In 90% of the categories, they can be used interchangeably, but for the Skin Corrosion/Irritant Category and the Specific Target Organ Toxicity (Single and Repeated Exposure) Categories. In these cases, our system will say UN GHS.

#### **GLOSSARY:**

ACGIH- American Conference of Governmental Industrial Hygienists; ANSI- American National Standards Institute; Canadian TDG-Canadian Transportation of Dangerous Goods; CAS- Chemical Abstract Service; Chemtrec- Chemical Transportation Emergency Center (US); CHIP- Chemical Hazard Information and Packaging; DSL- Domestic Substances List; EC- Equivalent Concentration; EH40 (UK)-HSE Guidance Note EH40 Occupational Exposure Limits; EPCRA- Emergency Planning and Community Right-To-Know Act; ESL- Effects screening levels; HMIS- Hazardous Material Information Service; LC- Lethal Concentration; LD- Lethal Dose; NFPA- National Fire Protection Association; OEL- Occupational Exposure Limits; OSHA- Occupational Safety and Health Administration, US Department of Labor; PEL- Permissible Exposure Limit; SARA (Title III)- Superfund Amendments and Reauthorization Act; SARA 313- Superfund Amendments and Reauthorization Act, Section 313; SCBA- Self-Contained Breathing Apparatus; STEL- Short Term Exposure Limit; TCEQ - Texas Commission on Environmental Quality; TLV- Threshold Limit Value; TSCA- Toxic Substances Control Act Public Law 94-469; TWA

### - Time Weighted Value; US DOT- US Department of Transportation; WHMIS- Workplace Hazardous Materials Information System.

### **DISCLAIMER**

To the best of our knowledge, the information contained herein is accurate. However, neither the above named supplier nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist. The above information pertains to this product as currently formulated, and is based on the information available at this time. Addition of reducers or other additives to this product may substantially alter the composition and hazards of the product. Since conditions of use are outside our control, we make no warranties, express or implied, and assume no liability in connection with any use of this information.