

# SAFETY DATA SHEET

# SECTION 1) CHEMICAL PRODUCT AND SUPPLIER'S IDENTIFICATION

**Product ID:** CJS-42500 / CJS-42505

Product Name: Waterstop Elastomeric Sealant

Revision Date: Feb 15, 2013 Date Printed: Feb 16, 2017

Version: 1.0 Supersedes Date: N.A.

Manufacturer's Name: Mar-flex Waterproofing & Building Products

Address: 500 Business Parkway Carlisle, OH, US, 45005

Emergency Phone: Chem-Trec: 1-800-424-9300

Information Phone Number: 513-422-7285 Fax: 513-422-7282

Product/Recommended Uses:

# **SECTION 2) HAZARDS IDENTIFICATION**

#### Classification:

Specific Target Organ Toxicity - Repeated Exposure - Category 1

Aspiration Hazard - Category 1

Skin Irritation - Category 3

Eye Irritation - Category 2A

Germ Cell Mutagenicity - Category 1B

Carcinogenicity - Category 1B

Reproductive Toxicity - Category 2

Chronic aquatic toxicity - Category 2

Acute aquatic toxicity - Category 3

Flammable Liquids - Category 3

# Pictograms:









# Signal Word:

Danger

# **Hazardous Statements - Physical:**

Flammable liquid and vapor

# **Hazardous Statements - Health:**

May cause damage to liver and urinary system.

May be fatal if swallowed and enters airways

Causes mild skin irritation

Causes serious eye irritation

May cause genetic defects.

May cause cancer.

Suspected of damaging fertility or the unborn child.

#### **Hazardous Statements - Environmental:**

Harmful to aquatic life

Toxic to aquatic life with long lasting effects

# **Precautionary Statements - General:**

If medical advice is needed, have product container or label at hand.

Keep out of reach of children.

Read label before use.

### **Precautionary Statements - Prevention:**

Do not breathe dust/fume/gas/mist/vapors/spray.

Wash thoroughly after handling.

Do not eat, drink or smoke when using this product.

Wear protective gloves/protective clothing/eye protection/face protection.

Obtain special instructions before use.

Do not handle until all safety precautions have been read and understood.

Avoid release to the environment.

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

Keep container tightly closed.

Ground/bond container and receiving equipment.

Use explosion-proof electrical equipment.

Use only non-sparking tools.

Take action to prevent static discharges.

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

Get Medical advice/attention if you feel unwell.

IF SWALLOWED: Immediately call a POISON CENTER or doctor.

Do NOT induce vomiting.

If skin irritation occurs: Get medical advice/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 advice/attention.

IF exposed or concerned: Get medical advice/attention.

Collect spillage.

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].

In case of fire: Use dry chemical, carbon dioxide, foam to extinguish.

### **Precautionary Statements - Storage:**

Store locked up. Store in a well-ventilated place. Keep cool. Keep container tightly closed.

# **Precautionary Statements - Disposal:**

Dispose of contents/container to disposal recycling center. Waste management should be in full compliance with federal, state and local laws.

# Hazards Not Otherwise Classified (HNOC):

None.

# Additional hazard information:

Fumes from product can be unpleasant, may cause nausea, headache and irritating to eyes, skin, and respiratory tract.

# SECTION 3) COMPOSITION / INFORMATION ON INGREDIENTS

CAS	Chemical Name	% By Weight
0008052-42-4	BITUMENS	40% - 80%

0009003-55-8	Polymers	0.0% - 25%
0064742-95-6	Aromatic Petroleum Distillates	0.0% - 25%
0008052-41-3	Aliphatic Hydrocarbons	0.0% - 25%
0000095-63-6	1,2,4-TRIMETHYLBENZENE	0.0% - 7%
0012174-11-7	PALYGORSKITE	0.0% - 10%
0009004-34-6	CELLULOSE (PAPER FIBER)	0.0% - 10%
0028701-67-9	Cationic Salt	0.0% - 3%
0001330-20-7	XYLENE	0.0% - 1.0%
0000098-82-8	CUMENE	0.0% - 1.0%
0000100-41-4	ETHYLBENZENE	Trace

Specific chemical identity and/or exact percentage (concentration) of the composition has been withheld to protect confidentiality.

# **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 or concerned: Get medical advice/attention.

# **Eye Contact:**

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.

#### Skin Contact:

Take off contaminated clothing, shoes and leather goods (e.g. watchbands, belts). Wash with plenty of lukewarm, gently flowing water for 15-20 minutes. Call a POISON CENTER/doctor if you feel unwell. Store contaminated clothing under water and wash before reuse.

IF exposed or concerned: Get medical advice/attention.

# Ingestion:

Rinse mouth. If you feel unwell/ If concerned: Get medical advice/attention. Do NOT induce vomiting. If vomiting occurs naturally, lie on your side, in the recovery position.

#### Most Important Symptoms and Effects, Both Acute and Delayed:

No data available

# Indication of Any Immediate Medical Attention and Special Treatment Needed:

No data available.

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

# Suitable Extinguishing Media:

Dry chemical, foam, carbon dioxide. Carbon dioxide can displace oxygen. Use caution when applying carbon dioxide in confined spaces. Sand or earth may be used for small fires only.

# **Unsuitable Extinguishing Media:**

No data available.

# Specific Hazards in Case of Fire:

Hazardous Decomposition Products can include: Carbon monoxides, carbon-dioxide, oxides of nitrogen.

Vapors are heavier than air and may settle in low places or spread a long distance to source of ignition and flash back.

When heated above flash point, material will release flammable vapors which can burn or be explosive in confined spaces if ignited. Do not mix with strong oxidants such as liquid chlorine or concentrated oxygen.

#### **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. 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 protective pressure self-contained breathing apparatus (SCBA) and full turnout gear.

# **SECTION 6) ACCIDENTAL RELEASE MEASURES**

#### **Emergency Procedure:**

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

Isolate hazard area and keep unnecessary people away. Notify authorities if any exposure to the general public or the environment occurs or is likely to occur.

Do not touch or walk through spilled material.

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

Ventilate area of spill.

#### **Recommended Equipment:**

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

#### **Personal Precautions:**

Avoid breathing vapor or spray mists.

Avoid contact with skin, eye 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:

Contain and collect spilled materials with non-combustible, absorbent material and place in a container for disposal according to local regulations. Dispose via a licensed waster disposal contractor. Contaminated absorbent material may pose the same physical hazards as the product.

# **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.

Eyewash stations and showers should be available in areas where this material is used and stored.

#### **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.

Take measures to prevent the build up of electrostatic charge.

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

### 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 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.

# **Respiratory Protection:**

If engineering controls do not maintain airborne concentrations to a level which is adequate to protect worker, a respiratory protection program that meets or is equivalent to OSHA 29 CFR 1910.134 and ANSI Z88.2 should be followed. Check with respiratory protective equipment suppliers.

Use supplied-air respirator in confined areas or with vapors in high concentrations.

# **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 STEL (ppm)	OSHA TWA (mg/m3)	OSHA TWA (ppm)	OSHA STEL (mg/m3)	OSHA Carcinogen	OSHA Skin designation	OSHA Tables (Z1, Z2, Z3)	NIOSH TWA (mg/m3)	NIOSH TWA (ppm)	NIOSH STEL (mg/m3)	NIOSH STEL (ppm)	NIOSH Carcinogen
1,2,4- TRIMETHYLBENZEN E								125	25			
Aliphatic Hydrocarbons		2900	500				1	350				
Aromatic Petroleum Distillates		2000	500				1					
BITUMENS												1
CELLULOSE (PAPER FIBER)		[15]; [5 (a)];					1	10,5a				
CUMENE		245	50			1	1	245	50			
ETHYLBENZENE		435	100				1	435	100	545	125	
XYLENE		435	100				1	435	100	655	150	

Chemical Name	ACGIH TWA (mg/m3)	ACGIH TWA (ppm)	ACGIH STEL (mg/m3)	ACGIH STEL (ppm)	ACGIH TLV Basis	ACGIH Carcinogen	ACGIH Notations
1,2,4- TRIMETHYLBENZEN E							
Aliphatic Hydrocarbons	572	100			Eye, skin, & kidney dam; nausea; CNS impair		
Aromatic Petroleum Distillates							
BITUMENS	0.5				URT & eye irr	A4	A4; BEI
CELLULOSE (PAPER FIBER)	10				URT irr		
CUMENE	246	50			Eye, skin, & URT irr; CNS impair		
ETHYLBENZENE		20			URT irr;Kidney dam (nephropat hy); Cochlear impair	A3	A3; BEI
XYLENE	434	100	651	150	URT & eye irr; CNS imapir	A4	A4; BEI

A3 - Confirmed Animal Carcinogen with Unknown Relevance to Humans, A4 - Not Classifiable as a Human Carcinogen, BEI - Substances for which there is a Biological Exposure Index or Indices, CNS - Central nervous system, dam - Damage, impair - Impairment, irr - Irritation, URT - Upper respiratory tract

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

# **Physical and Chemical Properties**

Density 10.01 lb/gal
% Solids By Weight N/A
Density VOC 3.50 lb/gal
% VOC 34.93%
Specific Gravity 1.20

Appearance Dark Liquid
Odor Threshold N/A

Odor Description Mild Petroleum Odor

рΗ N/A Water Solubility Insoluble Flammability N/A Flash Point Symbol N/A Flash Point (PMCC) 104 °F Viscosity N/A Lower Explosion Level N/A Upper Explosion Level N/A Vapor Pressure Vapor Density (Air =1) >4.0 Freezing Point N/A Melting Point N/A 300 °F Low Boiling Point 350 °F High Boiling Point Auto Ignition Temp N.A. Decomposition Pt N/A Evaporation Rate (Butyl Acetate=1)@ 77°F 0.2 Coefficient Water/Oil N/A

# **SECTION 10) STABILITY AND REACTIVITY**

# Stability:

The product is stable under normal storage conditions.

### **Conditions to Avoid:**

Avoid heat, sparks, flame and contact with incompatible materials.

# Hazardous Reactions/Polymerization:

Will not occur.

# **Incompatible Materials:**

Strong Oxidizers.

# **Hazardous Decomposition Products:**

Hazardous decomposition products formed under fire conditions - Carbon oxides, Nitrogen oxides.

# **SECTION 11) TOXICOLOGICAL INFORMATION**

### Likely Route of Exposure:

Inhalation, ingestion, skin absorption, eye contact.

# Skin Corrosion/Irritation:

Prolonged or repeated contact with skin may cause dermatitis.

Causes mild skin irritation

### Serious Eye Damage/Irritation:

Causes serious eye irritation

### Respiratory/Skin Sensitization:

No data available

### **Germ Cell Mutagenicity:**

May cause genetic defects.

#### Carcinogenicity:

May cause cancer.

# Reproductive Toxicity:

Suspected of damaging fertility or the unborn child.

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

No data available

#### Specific Target Organ Toxicity - Repeated Exposure:

Causes damage to organs through prolonged or repeated exposure.

#### **Aspiration Hazard:**

May be fatal if swallowed and enters airways

### **Acute Toxicity:**

0008052-42-4

Product may cause respiratory irritation, headache, dizziness, nausea and vomiting.

```
0000100-41-4 ETHYLBENZENE

LC50 (inhalation, rat): 4000 ppm; 4-hour exposure (3)

LD50 (oral, rat): 3.5 g/kg (1,3,5,10)

LD50 (oral, rat): 4.72 g/kg (3,5,7,8)

LD50 (dermal, rabbit): 17.8 g/kg (11)
```

RITLIMENS

LC50 (Rodent - rat, Inhalation): >94.4 mg/m3, Toxic effects: Details of toxic effects not reported other than lethal dose value.

LD50 (Rodent - rat, Oral): >5000 mg/kg, Toxic effects: Gastrointestinal - hypermotility, diarrhea.

```
0001330-20-7 XYLENE
```

LC50 (rat): 6350 ppm (4-hour exposure) (unspecified isomers and ethylbenzene) (1)LC50 (rat): 6700 ppm (4-hour exposure) (65% m -xylene, 7.6% o-xylene, 7.8% p-xylene, 19.3% ethylbenzene) (2) ethylbenzene) (1)

LĆ50 (rat): 6700 ppm (4-hour exposure) (65% m-xylene, 7.6% o-xylene, 7.8% p-xylene, 19.3% ethylbenzene)(2)

LD50 (oral, rat): 5400 mg/kg (52% m-, 19% o-, 24% p-) (1)LD50 (oral, female mouse): 5251 mg/kg (60.2% m-, 9.1% o-, 14.6% p-, 17.0% ethylbenzene) (4)

LD50 (oral, male mouse): 5627 mg/kg (60.2% m-, 9.1% o-, 14.6% p-, 17.0% ethylbenzene) (4)

LD50 (dermal, rabbit): 12180 mg/kg (m-xylene); greater than 1700 mg/kg (mixed xylenes - undefined composition) (3)

LD50 (oral, female mouse): 5251 mg/kg (60.2% m-, 9.1% o-, 14.6% p-, 17.0% ethylbenzene) (4)

LD50 (oral, male mouse): 5627 mg/kg (60.2% m-, 9.1% o-, 14.6% p-, 17.0% ethylbenzene) (4)

LD50 (dermal, rabbit): 12180 mg/kg (m-xylene); greater than 1700 mg/kg (mixed xylenes - undefined composition) (3)

# 0000098-82-8 CUMENE

```
LC50 (inhalation, mouse): 10 mg/L; (2000 ppm); 7-hr exposure (1,3) LC50 (inhalation, rat): 39 mg/L (8000 ppm); 4-hr exposure (1,3,6)
```

LD50 (oral, rat): Reported as 1.4 g/kg and 2.26 g/kg (1,3,4)

LD50 (skin, rabbit): 10627 mg/kg (4)

# 0000095-63-6 1,2,4-TRIMETHYLBENZENE

LC50 (rat): 18 g/m3 (4-hour exposure) (1)

LD50 (oral, rat): 5 g/kg (1)

# 0008052-41-3 Aliphatic Hydrocarbons

LC50 (rat): greater than 5500 mg/m3 (880 ppm) (whole body exposure for 4 hours) (1)

LC50 (rat): greater than 8200 mg/m3 (1300 ppm) (2)

LD50 (oral, rat): greater than 5 g/kg (1)

LD50 (dermal, rabbit): greater than 3 g/kg (1)

# **Chronic Exposure**

0000098-82-8 CUMENE

TERATOGENIC EFFECTS: Cumene has been Classified as POSSIBLE for humans.

0000100-41-4 ETHYLBENZENE

CARCINOGENIC EFFECTS: Ethyl Benzene has been listed by IARC as Group 2B, Possibly Carcinogenic to Humans.

TERATOGENIC EFFECTS: Ethyl Benzene has been Classified as POSSIBLE for humans.

0001330-20-7 XYLENE

High exposure to Xylenes in some animal studies have been reported to cause health effects on the developing embryo/fetus.

Xylene in high concentrations has caused embryotoxic effects in laboratory animals.

#### **Potential Health Effects - Miscellaneous**

0000100-41-4 ETHYLBENZENE

Is an IARC, NTP or OSHA carcinogen. Increased susceptibility to the effects of this material may be observed in people with preexisting disease of any of the following: central nervous system, kidneys, liver, lungs. Recurrent overexposure may result in liver and kidney injury. Studies in laboratory animals have shown reproductive, embryotoxic and developmental effects. WARNING: This chemical is known to the State of California to cause cancer.

0001330-20-7 XYLENE

Increased susceptibility to the effects of this material may be observed in people with preexisting disease of any of the following: bone marrow, cardiovascular system, central nervous system, kidneys, liver, lungs. Recurrent overexposure may result in liver and kidney injury. High exposures may produce irregular heart beats. Canada classifies Xylene as a developmental toxin as high exposures to xylenes in some animal studies have been reported to cause health effects on the developing fetus/embryo. These effects were often at levels toxic to the adult animal. The significance of these effects to humans is not known. Repeated or prolonged skin contact may cause any of the following: irritation, dryness, cracking of the skin.

0008052-42-4 BITUMENS

Is an IARC carcinogen. Occupational exposures to straight-run bitumens and their emissions during road paving are possibly carcinogenic to humans (Group 2B)

0064742-95-6 Aromatic Petroleum Distillates

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.

# **SECTION 12) ECOLOGICAL INFORMATION**

#### **Toxicity:**

Harmful to aquatic life

Toxic to aquatic life with long lasting effects

# Persistence and Degradability:

No data available.

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

No data available.

### Mobility in Soil:

No data available.

#### Other Adverse Effects:

No data available.

# **SECTION 13) DISPOSAL CONSIDERATIONS**

#### Waste Disposal:

Under RCRA it is the responsibility of the user of the product to determine at 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:**

UN number: N/A

Proper shipping name: Not regulated, non-bulk

Hazard class: N/A Packaging group: N/A

Hazardous substance (RQ): No data available Toxic-Inhalation Hazard: No data available Marine Pollutant: No data available Note / Special Provision: No data available

# **IMDG Information:**

UN number: UN1999

Proper shipping name: Tars, liquid including road oils and cutback bitumens

Hazard class: 3 Packaging group: III

Marine Pollutant: No data available Note / Special Provision: No data available

# **IATA Information:**

UN number: UN1999 Hazard class: 3 Packaging group: III

Proper shipping name: Tars, liquid including road oils and cutback bitumens

Note / Special Provision: No data available

# **SECTION 15) REGULATORY INFORMATION**

CAS	Chemical Name	% By Weight	Regulation List
0008052-42-4	BITUMENS	40% - 80%	SARA312,IARCCarcinogen,TSCA,TSCA_UVCB - CHEMICAL SUBSTANCES OF UNKNOWN OR VARIABLE COMPOSITION, COMPLEX REACTION PRODUCTS AND BIOLOGICAL MATERIALS
0009003-55-8	Polymers	0.0% - 25%	SARA312,VOC,IARCCarcinogen,TSCA
0064742-95-6	Aromatic Petroleum Distillates	0.0% - 25%	SARA312,VOC,TSCA,TSCA_UVCB - CHEMICAL SUBSTANCES OF UNKNOWN OR VARIABLE COMPOSITION, COMPLEX REACTION PRODUCTS AND BIOLOGICAL MATERIALS
0008052-41-3	Aliphatic Hydrocarbons	0.0% - 25%	SARA312,VOC,TSCA,TSCA_UVCB - CHEMICAL SUBSTANCES OF UNKNOWN OR VARIABLE COMPOSITION, COMPLEX REACTION PRODUCTS AND BIOLOGICAL MATERIALS
0000095-63-6	1,2,4- TRIMETHYLBENZENE	0.0% - 7%	SARA313, SARA312,VOC,TSCA
0012174-11-7	PALYGORSKITE	0.0% - 10%	SARA312,IARCCarcinogen,CA_Prop65 - California Proposition 65,CA_Prop65_Type_Toxicity_Cancer - CA_Proposition65_Type_Toxicity_Cancer
0009004-34-6	CELLULOSE (PAPER FIBER)	0.0% - 10%	SARA312,TSCA
0028701-67-9	Cationic Salt	0.0% - 3%	SARA312,TSCA
0001330-20-7	XYLENE	0.0% - 1.0%	SARA313, CERCLA,SARA312,VOC,IARCCarcinogen,TSCA
0000098-82-8	CUMENE	0.0% - 1.0%	SARA313, CERCLA,SARA312,VOC,NTPCarcinogen,TSCA,CA_Prop65 - California Proposition 65,CA_Prop65_Type_Toxicity_Cancer - CA_Proposition65_Type_Toxicity_Cancer
0000100-41-4	ETHYLBENZENE	Trace	SARA313, CERCLA, SARA312, VOC, IARCCarcinogen, TSCA, CA_Prop65 - California Proposition 65, CA_Prop65_Type_Toxicity_Cancer - CA_Proposition65_Type_Toxicity_Cancer

# **SECTION 16) OTHER INFORMATION**

#### Glossary:

ACGIH- American Conference of Governmental Industrial Hygienists; ANSI- American National Standards Institute; Canadian TDGCanadian 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)- ESE 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.

# **HMIS**



(\*) - 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

#### Version 1.0:

Revision Date: Feb 15, 2013

First Edition.

# **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.