

SAFETY DATA SHEET

SECTION 1) CHEMICAL PRODUCT AND SUPPLIER'S IDENTIFICATION

Product ID: CMB-36120 / CMB-36125 / CMB-36127 / CMB-36129
Product Name: ArmorBlock 361 WB
Revision Date: Feb 21, 2017 **Date Printed:** Feb 21, 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:

Skin Irritation - Category 3
Germ Cell Mutagenicity - Category 1B
Carcinogenicity - Category 1B
Acute aquatic toxicity - Category 3
Chronic aquatic toxicity - Category 3

Pictograms:



Signal Word:

Danger

Hazardous Statements - Health:

Causes mild skin irritation
May cause genetic defects.
May cause cancer.

Hazardous Statements - Environmental:

Harmful to aquatic life
Harmful 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:

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

Avoid release to the environment.

Precautionary Statements - Response:

If skin irritation occurs: Get medical advice/attention.

IF exposed or concerned: Get medical advice/attention.

Precautionary Statements - Storage:

Store locked up.

Precautionary Statements - Disposal:

Dispose of contents/container to disposal recycling center.

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.

Hazards Not Otherwise Classified (HNOC):

None.

Other hazards:

Hot product can cause severe burns.

Asphalt is liquid at 150 to 200 degrees F and skin contact will cause thermal burns. When heated this material may vent toxic levels of Hydrogen Sulfide (H₂S) vapors that accumulate in the vapor spaces of storage and transport compartments. H₂S can cause eye, skin and respiratory tract irritation and asphyxiation. Avoid skin contact. Repeated and long term skin exposure to components of this product has caused cancer in laboratory animals.

Deliberate or direct ingestion of vapor or spray or mist may be harmful or fatal. Hot product can cause severe burns.

Acute toxicity of 3.75% of the mixture is unknown

SECTION 3) COMPOSITION / INFORMATION ON INGREDIENTS

CAS	Chemical Name	% By Weight
0008052-42-4	BITUMENS	33% - 78%
0068410-97-9	LACQUER DILUENT NAPHTHA	1% - 1%
0064742-49-0	VM & P NAPHTHA	1% - 1%
0064742-89-8	ALIPHATIC, LIGHT HYDROCARBON SOLVENT	1% - 1%
0000111-65-9	OCTANE	0.0% - 0.4%
0000142-82-5	N-HEPTANE	0.0% - 0.4%
0064742-47-8	ISOPARAFFINIC PETROLEUM DISTILLATE	0.0% - 0.4%
0035691-65-7	1-BROMO-1-(BROMOMETHYL)-1,3-PROPANEDICARBONITRILE	Trace
0002634-33-5	1,2-BENZISOTHIAZOL-3(2H)-ONE	Trace
0000091-20-3	NAPHTHALENE	Trace
0000108-88-3	TOLUENE	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. Immediately call a POISON CENTER/doctor. If breathing has stopped, trained personnel should begin rescue breathing or, if the heart has stopped, immediately start cardiopulmonary resuscitation (CPR) or automated external defibrillation (AED).

Eye Contact:

For contact with vapors: 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 a duration of 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.

Contact with hot asphalt: flush with large amounts of tepid water for at least 15 minutes. Immediately call a doctor.

Skin Contact:

Contact with hot asphalt: immerse or flush skin with cold water for at least 15 minutes. Immediately call doctor. Do not attempt to remove solidified material since removal may cause further tissue injury. Cold material over a burn should not be removed except by a physician. Remove cold material (not associated with a burn) with waterless hand cleaner and then wash with soap and water.

Ingestion:

Unlikely route of exposure. CALL A PHYSICIAN IMMEDIATELY! DO NOT induce vomiting. Keep calm. Do not leave unattended.

Most Important Symptoms and Effects, Both Acute and Delayed:

Pre-existing eye, skin, and respiratory disorders may be aggravated by exposure to components of this product.

Indication of Any Immediate Medical Attention and Special Treatment Needed:

Recommended practise is not to attempt to remove hot material associated with a burn. Allow the solidified material to remain in place until cooled so it can naturally fall off. Natural separation will occur in 48-72 hours. If removal is attempted, mineral oil may be used to remove asphalt once it has cooled. For best results, work it into the skin around the material and allow the material to "float" off.

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:

Do not use direct water stream. Since this may cause fire to spread.

Specific Hazards in Case of Fire:

Treat as fuel fire.

This product is neither flammable or combustible material, but will burn when heated to extremely high temperatures.

Hazardous decomposition products can include toxic oxides of sulfur, carbon monoxide, sulfur dioxide, hydrogen sulfide and hydrocarbons.

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.

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. 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 can retain residue and may be dangerous.

Protect from freezing. Product will freeze at 32 degrees F. Product does not follow a normal freeze thaw cycle. If freezing occurs product becomes unusable.

Do not cut, drill, grind, weld or perform similar operations on or near containers. Do not pressurize containers to empty them.

Handling Precautions:

When opening covers and outlet caps on storage tanks ,use face shield and gloves to avoid possible injury from pressurized product. Harmful concentrations of hydrogen sulfide(H₂S)gas can be generated and accumulate in storage tanks and bulk transport compartments. Stay up wind and vent open hatches before unloading. Keep heating coils and flues in storage tanks ,trucks and kettles covered with product(8").Do not overheat.

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:

When handling hot material, use heat resistant gloves.

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.

NIOSH/MSHA VAPOR AND DUST RESPIRATOR IS REQUIRED.

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
ALIPHATIC, LIGHT HYDROCARBON SOLVENT		2000	500				1					
BITUMENS												1
ISOPARAFFINIC PETROLEUM DISTILLATE		2000	500				1					
LACQUER DILUENT NAPHTHA		2000	500				1					
NAPHTHALENE		50	10				1	50	10	75	15	

N-HEPTANE		2000	500			1	350	85			
OCTANE		2350	500			1	350	75			
TOLUENE	500ppm /10 minutes (a)	0.2	200 (a)/ 300 ceiling			1,2	375	100	560	150	
VM & P NAPHTHA		2000	500			1	350				

Chemical Name	ACGIH TWA (mg/m3)	ACGIH TWA (ppm)	ACGIH STEL (mg/m3)	ACGIH STEL (ppm)	ACGIH TLV Basis	ACGIH Carcinogen	ACGIH Notations
ALIPHATIC, LIGHT HYDROCARBON SOLVENT							
BITUMENS	0.5				URT & eye irr	A4	A4; BEI
ISOPARAFFINIC PETROLEUM DISTILLATE							
LACQUER DILUENT NAPHTHA							
NAPHTHALENE		10			URT irr; cataracts; hemolytic anemia	A3	Skin; A3
N-HEPTANE	1640	400	2050	500	CNS impair; URT irr		
OCTANE	1400	300			URT irr		
TOLUENE	0.2	20			Visual impair; female repro; pregnancy loss	A4	A4; BEI
VM & P NAPHTHA							

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, impair - Impairment, irr - Irritation, repro - reproductive, URT - Upper respiratory tract

SECTION 9) PHYSICAL AND CHEMICAL PROPERTIES

Physical and Chemical Properties

Density	8.79 lb/gal
% Solids By Weight	N/A
Density VOC	0.37 lb/gal
% VOC	0.00%
Specific Gravity	1.05

Appearance	Black or brown liquid
Odor Threshold	N/A
Odor Description	Carbon odor
pH	N/A
Water Solubility	Dispersible
Flammability	N/A
Flash Point Symbol	N/A
Flash Point	100 °C (212 °F)
Viscosity	N/A

Lower Explosion Level	N/A
Upper Explosion Level	N/A
Vapor Pressure	Negligible @ 77 °F
Vapor Density	N/A
Freezing Point	32 °F
Melting Point	N/A
Low Boiling Point	100 °C (212 °F)
High Boiling Point	N/A
Auto Ignition Temp	N.A.
Decomposition Pt	N/A
Evaporation Rate	N/A
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, high temperature and contact with incompatible materials.

Hazardous Reactions/Polymerization:

Will not occur.

Incompatible Materials:

Strong Oxidizers.

Hazardous Decomposition Products:

Combustion produces toxic oxides of sulfur, carbon monoxide, sulfur dioxide, hydrogen sulfide and hydrocarbons.

SECTION 11) TOXICOLOGICAL INFORMATION

Likely Route of Exposure:

Inhalation, ingestion, skin absorption, eye contact.

Skin Corrosion/Irritation:

Causes mild skin irritation

Serious Eye Damage/Irritation:

No data available

Respiratory/Skin Sensitization:

No data available

Germ Cell Mutagenicity:

May cause genetic defects.

Carcinogenicity:

May cause cancer.

Reproductive Toxicity:

No data available

Specific Target Organ Toxicity - Single Exposure:

No data available

Specific Target Organ Toxicity - Repeated Exposure:

No data available

Aspiration Hazard:

No data available

Acute Toxicity:

This product contains a toxicologically significant concentration of hydrogen sulfide (H₂S). Hydrogen sulfide gas (H₂S) is toxic by inhalation. Prolonged breathing of 50-100 ppm H₂S vapors can produce eye and respiratory tract irritation. Higher concentrations (250-600ppm) for 15-30 minutes can produce headache, dizziness, nervousness, nausea and pulmonary edema or bronchial pneumonia. Concentrations of >1000 ppm will cause immediate unconsciousness and death through respiratory paralysis. Over the years a number of acute cases of H₂S poisoning have been reported. Complete and rapid recovery is the general rule. However, if the exposure was sufficiently intense and sustained causing cerebral hypoxia (lack of oxygen to the brain), neurologic effects such as amnesia, intension tremors or brain damage are possible.

0000111-65-9 OCTANE

LC50 (rat): 28,438 ppm (118,000 mg/m³); 4-hr exposure (unconfirmed).(10)

0000142-82-5 N-HEPTANE

LC50 (rat): approximately 25000 ppm (4-hour exposure); cited as 103 g/m³ (4-hour exposure) (6)

LD50 (oral, rat): Greater than 15000 mg/kg (4)

0000108-88-3 TOLUENE

LC50 (rat): 8800 ppm (4-hour exposure) (2)

LC50 (rat): 6000 ppm (6-hour exposure) (3)

LD50 (oral, rat): 2600 to 7500 mg/kg (3,5,11,17)

LD50 (oral, neonatal rat): less than 870 mg/kg (3)

LD50 (dermal, rabbit): 12,225 mg/kg (reported as 14.1 ml/kg) (1)

0000091-20-3 NAPHTHALENE

LC50: Insufficient data

LD50 (oral, mouse): 533 mg/kg (male); 710 mg/kg (female) (1)

LD50 (oral, rat): 1780 mg/kg (2)

0008052-42-4 BITUMENS

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.

Potential Health Effects - Miscellaneous

0000091-20-3 NAPHTHALENE

Is an IARC, NTP or OSHA carcinogen. Tests in some laboratory animals demonstrate carcinogenic activity. Increased susceptibility to the effects of this material may be observed in people with preexisting disease of any of the following: kidneys, liver. Recurrent overexposure may result in liver and kidney injury. WARNING: This chemical is known to the State of California to cause cancer.

0000108-88-3 TOLUENE

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, respiratory system, skin. Can be absorbed through the skin in harmful amounts. Recurrent overexposure may result in liver and kidney injury. High airborne levels have produced irregular heart beats in animals and occasional palpitations in humans. Rats exposed to very high airborne levels have exhibited high frequency hearing deficits. The significance of this to man is unknown. WARNING: This chemical is known to the State of California to cause birth defects or other reproductive harm.

0000142-82-5 N-HEPTANE

Increased susceptibility to the effects of this material may be observed in people with preexisting disease of any of the following: central nervous system, respiratory system, skin. May cause central nervous system effects such as dizziness, headache, nausea, and loss of consciousness. 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. Aspiration may occur during swallowing or vomiting, resulting in lung damage.

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)

0064742-89-8 ALIPHATIC, LIGHT HYDROCARBON SOLVENT

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

0000108-88-3 TOLUENE

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

SECTION 12) ECOLOGICAL INFORMATION

Toxicity:

Harmful to aquatic life with long lasting effects

If spilled, hot product and/or the coating action of the oil components could harm plant life. This product does not concentrate or accumulate in the food chain.

Other Adverse Effects:

No data available.

Bio-accumulative Potential

0064742-47-8 ISOPARAFFINIC PETROLEUM DISTILLATE

Contains constituents with the potential to bio accumulate.

Mobility in Soil

0064742-47-8 ISOPARAFFINIC PETROLEUM DISTILLATE

Floats on water. Contains volatile constituents. Evaporates within a day from water or soil surfaces. Large volumes may penetrate soil and could contaminate groundwater.

Persistence and Degradability

0064742-47-8 ISOPARAFFINIC PETROLEUM DISTILLATE

Expected to be inherently biodegradable. The volatile constituents will oxidize rapidly by photochemical reactions in air.

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/NA #: Not regulated

Proper Shipping Name: Non-Regulated, Water Based Emulsified Asphalt

Hazard Class: Not applicable

Packing Group: Not applicable

Packaging Exceptions: Bulk, Package Water Based Emulsified Asphalt Liquid Per 49 CFR 172.101

IMDG Information:

UN/NA #: Not regulated

Proper Shipping Name: Not applicable

Hazard Class: Not applicable

Packing Group: Not applicable

Marine Pollutant: No data available

IATA Information:

UN/NA #: Not regulated

Proper Shipping Name: Not applicable

Hazard Class: Not applicable

Packing Group: Not applicable

SECTION 15) REGULATORY INFORMATION

CAS	Chemical Name	% By Weight	Regulation List
0008052-42-4	BITUMENS	33% - 78%	SARA312,IARCCarcinogen,TSCA,TSCA_UVCB - CHEMICAL SUBSTANCES OF UNKNOWN OR VARIABLE COMPOSITION, COMPLEX REACTION PRODUCTS AND BIOLOGICAL MATERIALS
0068410-97-9	LACQUER DILUENT NAPHTHA	1% - 1%	SARA312,VOC,TSCA,TSCA_UVCB - CHEMICAL SUBSTANCES OF UNKNOWN OR VARIABLE COMPOSITION, COMPLEX REACTION PRODUCTS AND BIOLOGICAL MATERIALS
0064742-49-0	VM & P NAPHTHA	1% - 1%	SARA312,VOC,TSCA,TSCA_UVCB - CHEMICAL SUBSTANCES OF UNKNOWN OR VARIABLE COMPOSITION, COMPLEX REACTION PRODUCTS AND BIOLOGICAL MATERIALS
0064742-89-8	ALIPHATIC, LIGHT HYDROCARBON SOLVENT	1% - 1%	SARA312,VOC,TSCA,TSCA_UVCB - CHEMICAL SUBSTANCES OF UNKNOWN OR VARIABLE COMPOSITION, COMPLEX REACTION PRODUCTS AND BIOLOGICAL MATERIALS
0000111-65-9	OCTANE	0.0% - 0.4%	SARA312,VOC,TSCA
0000142-82-5	N-HEPTANE	0.0% - 0.4%	SARA312,VOC,TSCA
0064742-47-8	ISOPARAFFINIC PETROLEUM DISTILLATE	0.0% - 0.4%	SARA312,VOC,TSCA,TSCA_UVCB - CHEMICAL SUBSTANCES OF UNKNOWN OR VARIABLE COMPOSITION, COMPLEX REACTION PRODUCTS AND BIOLOGICAL MATERIALS
0035691-65-7	1-BROMO-1-(BROMOMETHYL)-1,3-PROPANEDICARBONITRILE	Trace	SARA313, SARA312,TSCA
0002634-33-5	1,2-BENZISOTHAZOL-3(2H)-ONE	Trace	SARA312,TSCA
0000091-20-3	NAPHTHALENE	Trace	SARA313, CERCLA,SARA312,VOC,TSCA,CA_Prop65 - California Proposition 65,CA_Prop65_Type_Toxicity_Cancer - CA_Proposition65_Type_Toxicity_Cancer
0000108-88-3	TOLUENE	Trace	CERCLA,SARA312,VOC,IARCCarcinogen,TSCA,CA_Prop65 - California Proposition 65,CA_Prop65_Type_Toxicity_Develop - CA_Proposition65_Type_Toxicity_Developmental

SECTION 16) OTHER INFORMATION

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)- 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

Health	* 1
FLAMMABILITY	1
Physical Hazard	0
Personal Protection	G

(*) - 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 21, 2017

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.