

SAFETY DATA SHEET

SECTION 1) CHEMICAL PRODUCT AND SUPPLIER'S IDENTIFICATION

Product ID: IA-68140 A

Product Name: Low Viscosity Epoxy Crack Filler (Side A)

Revision Date: May 01, 2015 Date Printed: Jan 31, 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 -Single Exposure (Respiratory Tract Irritation) - Category 3

Specific Target Organ Toxicity - Repeated Exposure - Category 2

Skin Irritation - Category 2

Eye Irritation - Category 2A

Respiratory Sensitizer (Solid/Liquid) - Category 1

Skin Sensitizer - Category 1

Germ Cell Mutagenicity - Category 2

Carcinogenicity - Category 2

Chronic aquatic toxicity - Category 2

Acute aquatic toxicity - Category 2

Acute toxicity Dermal - Category 3

Acute toxicity Oral - Category 3

Pictograms:









Signal Word:

Danger

Hazardous Statements - Health:

May cause respiratory irritation

May cause damage to organs through prolonged or repeated exposure.

Causes skin irritation

Causes serious eye irritation

May cause allergy or asthma symptoms or breathing difficulties if inhaled

May cause an allergic skin reaction

Suspected of causing genetic defects.

Suspected of causing cancer.

Toxic if swallowed

Toxic in contact with skin

Hazardous Statements - Environmental:

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:

Use only outdoors or in a well-ventilated area.

Keep container tightly closed.

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

Wash thoroughly after handling.

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

[In case of inadequate ventilation] wear respiratory protection.

Contaminated work clothing should not be allowed out of the workplace.

Obtain special instructions before use.

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

Avoid release to the environment.

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

Precautionary Statements - Response:

IF INHALED: Remove person to fresh air and keep comfortable for breathing.

Call a POISON CENTER/doctor,if you feel unwell.

Get Medical advice/attention if you feel unwell.

IF ON SKIN: Wash with plenty of water.

Specific treatment (see First-aid measures on this SDS).

Take off contaminated clothing. And wash it 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 advice/attention.

If experiencing respiratory symptoms: Call a POISON CENTER/doctor.

If skin irritation or a rash occurs: Get medical advice/attention.

IF exposed or concerned: Get medical advice/attention.

Collect spillage.

IF SWALLOWED: Immediately call a POISON CENTER or doctor.

Rinse mouth.

Take off immediately all contaminated clothing. And wash it before reuse.

Precautionary Statements - Storage:

Store in a well-ventilated place. Store locked up.

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.

SECTION 3) COMPOSITION / INFORMATION ON INGREDIENTS

| CAS | Chemical Name | % By Weight |
|--------------|--------------------------------------|-------------|
| 0025068-38-6 | BISPHENOL A DIGLYCIDYL ETHER POLYMER | 65% - 95% |
| 0000098-00-0 | FURFURYL ALCOHOL | 5% - 35% |
| 0002426-08-6 | PROPANE, 1-BUTOXY-2,3-EPOXY | 0.0% - 10% |

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:

Remove source of exposure or move person to fresh air. 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.

Skin Contact:

Take off contaminated clothing, shoes and leather goods (e.g. watchbands, belts). Wash with plenty of lukewarm, gently flowing water and mild soap for 15-20 minutes. If skin irritation occurs: Get medical advice/attention. Wash contaminated clothing before re-use.

Ingestion:

Rinse mouth. Drink plenty of water and induce vomiting. Obtain immediate medical attention.

Most Important Symptoms and Effects, Both Acute and Delayed:

Medical conditions generally aggravated by exposure include: Allergy, eczema, skin conditions

Chronic or repeated exposure may cause irritation, sensitization and dermatitis.

SECTION 5) FIRE-FIGHTING MEASURES

Suitable Extinguishing Media:

Dry chemical, foam or carbon dioxide is recommended. 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.

Unsuitable Extinguishing Media:

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

Specific Hazards in Case of Fire:

Unusual fire and explosion hazards.

Burning produces noxious and toxic fumes.

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 NIOSH approved, 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:

Small Spill: Absorb with rag. Wear proper personal protective equipment. Place in a chemical waste container for proper disposal.

Large Spill: Absorb with dry chemical absorbent, earth, sand or any other inert material. Wear proper personal protective equipment. Place in a chemical waster container for proper disposal. Flush contaminated areas with water.

Place spilled material in a container for disposal according to local, state and federal laws and 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.

Heating: Use personal protective equipment when transferring material to or from drums, totes or other containers.

Use disposable containers and paper on work area.

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 containers can retain residue and may be dangerous.

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.

Use of barrier cream recommended.

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.

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 |
|---------------------------------|-----------------------|------------------------|----------------------|-------------------------|--------------------|-----------------------------|--------------------------------|-------------------------|-----------------------|--------------------------|------------------------|---------------------|
| FURFURYL ALCOHOL | | 200 | 50 | | | | 1 | 40 | 10 | 60 | 15 | |
| PROPANE, 1- BUTOXY-2,3-EPOXY | | 270 | 50 | | | | 1 | | | | | |

| Chemical Name | ACGIH TWA (mg/m3) | ACGIH TWA (ppm) | ACGIH STEL (mg/m3) | ACGIH STEL (ppm) | ACGIH TLV Basis | ACGIH Carcinogen | ACGIH Notations |
|---------------------------------|-------------------------|-----------------------|--------------------------|------------------------|---------------------|---------------------|--------------------|
| FURFURYL ALCOHOL | 40 | 10 | 60 | 15 | URT & eye irr | | Skin |
| PROPANE, 1- BUTOXY-2,3-EPOXY | | 3 | | | Reproducti on; sens | | Skin, DSEN |

DSEN - Dermal sensitization, irr - Irritation, sens - sensitization, 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 2.22 lb/gal
% VOC 22.14%
Specific Gravity 1.20

Gray liquid Appearance Odor Threshold N/A Odor Description Low рΗ N/A Water Solubility Slight Flammability N/A Flash Point Symbol Flash Point (CL) 490 °F Viscosity N/A N/A Lower Explosion Level Upper Explosion Level N/A Vapor Pressure N/A Vapor Density N/A Freezing Point < 32 °F Melting Point N/A 200 °F Low Boiling Point 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, freezing and contact with incompatible materials.

Hazardous Reactions/Polymerization:

No data available.

Incompatible Materials:

Strong oxidizing agents, strong acids and bases.

Hazardous Decomposition Products:

Carbon monoxide, carbon dioxide, aldehydes and other organics.

SECTION 11) TOXICOLOGICAL INFORMATION

Likely Route of Exposure:

Inhalation, ingestion, skin absorption, eye contact.

Skin Corrosion/Irritation:

Causes skin irritation

Serious Eye Damage/Irritation:

Causes serious eye irritation

Respiratory/Skin Sensitization:

May cause allergy or asthma symptoms or breathing difficulties if inhaled

May cause an allergic skin reaction

Germ Cell Mutagenicity:

Suspected of causing genetic defects.

Carcinogenicity:

Suspected of causing cancer.

Reproductive Toxicity:

No data available

Specific Target Organ Toxicity - Single Exposure:

May cause respiratory irritation

Specific Target Organ Toxicity - Repeated Exposure:

May cause damage to organs through prolonged or repeated exposure.

Aspiration Hazard:

No data available

Acute Toxicity:

No data available

0000098-00-0 FURFURYL ALCOHOL

LC50 (rat): 85 ppm (exposure duration not reported) (2); 233 ppm; 4-hour exposure (1)

LC50 (mouse): 397 ppm (exposure duration not reported) (2)

LD50 (oral, rat): 132 mg/kg; 275 mg/kg (1) LD50 (dermal, rabbit): 657 mg/kg (2)

0002426-08-6 PROPANE, 1-BUTOXY-2,3-EPOXY

LD50 (oral, rat): 1865 mg/kg (cited as 2.05 mL/kg) (7) LD50 (dermal, rabbit): 2293 mg/kg (cited as 2.52 mL/kg) (7)

Potential Health Effects - Miscellaneous

0025068-38-6 BISPHENOL A DIGLYCIDYL ETHER POLYMER

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 guin

SECTION 12) ECOLOGICAL INFORMATION

Toxicity:

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.

The generation of waste should be avoided or minimized whenever possible. Chemical waste, even small quantities, should never be poured down drains, sewers or waterways.

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.

Chemical additions, processing, storage, or otherwise altering this material may make the waste management information presented in this SDS incomplete, inaccurate or otherwise inappropriate. Waste characterization and disposal compliance is the responsibility solely of the party generating the waste or deciding to discard or dispose of the material.

SECTION 14) TRANSPORT INFORMATION

U.S. DOT Information:

UN number: UN2810

Proper shipping name: Toxic, liquids, organic, n.o.s. (BISPHENOL A DIGLYCIDYL ETHER POLYMER, FURFURYL ALCOHOL,

PROPANE, 1-BUTOXY-2,3-EPOXY)

Hazard class: 6 Packaging group: III

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: UN2810

Proper shipping name: Toxic, liquids, organic, n.o.s. (BISPHENOL A DIGLYCIDYL ETHER POLYMER, FURFURYL ALCOHOL,

PROPANE, 1-BUTOXY-2,3-EPOXY)

Hazard class: 6 Packaging group: III

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

IATA Information:

UN number: UN2810 Hazard class: 6 Packaging group: III

Proper shipping name: Toxic, liquids, organic, n.o.s. (BISPHENOL A DIGLYCIDYL ETHER POLYMER, FURFURYL ALCOHOL,

PROPANE, 1-BUTOXY-2,3-EPOXY)
Note / Special Provision: No data available

SECTION 15) REGULATORY INFORMATION

California Proposition 65:

In order to comply with California Proposition 65, we feel obligated to advise that some of our products may conceivably contain trace contaminants of some of the listed chemicals. While not necessarily added to our products as ingredients, some listed chemicals may be present in the raw materials from suppliers and over which we have no control. Therefore, even though some of the listed substances may not be present, a significant risk as defined by the regulations in order to comply with California law, we feel obligated to make the following statement:

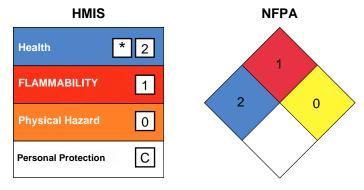
WARNING: Our products may contain trace amounts of some chemicals considered by the State of California to be carcinogens or reproductive toxicants.

| CAS | Chemical Name | % By Weight | Regulation List |
|--------------|--|-------------|---|
| 0025068-38-6 | BISPHENOL A DIGLYCIDYL ETHER POLYMER | 65% - 95% | SARA312,TSCA |
| 0000098-00-0 | FURFURYL ALCOHOL | 5% - 35% | SARA312,VOC,TSCA,CA_Prop65 - California Proposition 65,CA_Prop65_Type_Toxicity_Cancer - CA_Proposition65_Type_Toxicity_Cancer |
| 0002426-08-6 | PROPANE, 1-BUTOXY-2,3 -EPOXY | 0.0% - 10% | SARA312,VOC,TSCA |

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.



(*) - 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: May 01, 2015

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.



SAFETY DATA SHEET

SECTION 1) CHEMICAL PRODUCT AND SUPPLIER'S IDENTIFICATION

Product ID: IA-68140 B

Product Name: Low Viscosity Epoxy Crack Filler (Side B)

Revision Date: May 01, 2015 Date Printed: Feb 09, 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 2

Skin Corrosion - Category 1B

Serious Eye Damage - Category 1

Respiratory Sensitizer (Solid/Liquid) - Category 1

Carcinogenicity - Category 2

Chronic aquatic toxicity - Category 2

Flammable Liquids - Category 4

Corrosive to metals - Category 1

Acute aquatic toxicity - Category 2

Acute toxicity Dermal - Category 3

Acute toxicity Oral - Category 3

Pictograms:









Signal Word:

Danger

Hazardous Statements - Physical:

May be corrosive to metals

Combustible Liquid

Hazardous Statements - Health:

May cause damage to organs through prolonged or repeated exposure.

Causes severe skin burns and eye damage

Causes serious eye damage

May cause allergy or asthma symptoms or breathing difficulties if inhaled

Suspected of causing cancer.

Toxic if swallowed

Toxic in contact with skin

Hazardous Statements - Environmental:

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.

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

[In case of inadequate ventilation] wear respiratory protection.

Obtain special instructions before use.

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

Avoid release to the environment.

Keep only in original packaging.

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

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

Precautionary Statements - Response:

Get Medical advice/attention if you feel unwell.

IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

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

Wash contaminated clothing before reuse.

Call a POISON CENTER/doctor, if you feel unwell.

IF INHALED: Remove person to fresh air and keep comfortable for breathing.

Immediately call a POISON CENTER or doctor.

Specific treatment (see First-aid measures on this SDS).

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

If experiencing respiratory symptoms: Call a POISON CENTER/doctor.

IF exposed or concerned: Get medical advice/attention.

Collect spillage.

Absorb spillage to prevent material damage.

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

IF SWALLOWED: Immediately call a POISON CENTER or doctor.

Rinse mouth.

Precautionary Statements - Storage:

Store locked up.

Store in a corrosive resistant container with a resistant inner liner

Store in a well-ventilated place.

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.

Acute toxicity of 66.32% of the mixture is unknown

SECTION 3) COMPOSITION / INFORMATION ON INGREDIENTS

| CAS | Chemical Name | % By Weight |
|--------------|---------------------------|-------------|
| Proprietary | Polyamine/Polyamide Blend | 0.0% - 70% |
| 0000098-00-0 | FURFURYL ALCOHOL | 10% - 15% |
| 0000104-40-5 | 4-Nonylphenol | 0.0% - 15% |
| 0000111-40-0 | DIETHYLENE TRIAMINE | 0.0% - 5% |

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

SECTION 4) FIRST-AID MEASURES

Inhalation:

Eliminate all ignition sources if safe to do so. 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.

Eye Contact:

Remove source of exposure or move person to fresh air. 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 30 minutes or until medical aid is available. Take care not to rinse contaminated water into the unaffected eye or onto the face. Immediately call a POISON CENTER or doctor, preferably an eye specialist.

Skin Contact:

Take off immediately all contaminated clothing, shoes and leather goods (e.g. watchbands, belts). Rinse skin with lukewarm, gently flowing water/shower for 30 minutes or until medical aid is available. Immediately call a POISON CENTER or doctor. Wash contaminated clothing before re-use or discard.

Ingestion:

Rinse mouth. If conscious, give plenty of water to drink. Do NOT induce vomiting. Immediately call a POISON CENTER/doctor. If vomiting occurs naturally, lie on your side, in the recovery position.

Most Important Symptoms and Effects, Both Acute and Delayed:

Medical conditions generally aggravated by exposure include: Allergy, eczema, skin conditions

High concentrations of vapor can cause irritation of respiratory tract, nausea and vomiting.

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 water spray or fog 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.

Unsuitable Extinguishing Media:

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

Specific Hazards in Case of Fire:

Burning produces noxious and toxic fumes. Avoid breathing smoke.

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 NIOSH approved, 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, state and federal laws and 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.

Use personal protective equipment when transferring material to or from drums, totes or other containers.

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, open flame 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.

Protect from freezing.

When stored properly in sealed containers, typical shelf life is 6 months or more from the date of manufacture.

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.

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 |
|------------------------|-----------------------|------------------------|----------------------|-------------------------|--------------------|-----------------------------|--------------------------------|-------------------------|-----------------------|--------------------------|------------------------|---------------------|
| DIETHYLENE TRIAMINE | | | | | | | | 4 | 1 | | | |
| FURFURYL ALCOHOL | | 200 | 50 | | | | 1 | 40 | 10 | 60 | 15 | |

| Chemical Name | ACGIH TWA (mg/m3) | ACGIH TWA (ppm) | ACGIH STEL (mg/m3) | ACGIH STEL (ppm) | ACGIH TLV Basis | ACGIH Carcinogen | ACGIH Notations |
|------------------------|-------------------------|-----------------------|--------------------------|------------------------|--------------------|---------------------|--------------------|
| DIETHYLENE TRIAMINE | 4.2 | 1 | | | URT & eye irr | | Skin |
| FURFURYL ALCOHOL | 40 | 10 | 60 | 15 | URT & eye irr | | Skin |

irr - Irritation, URT - Upper respiratory tract

SECTION 9) PHYSICAL AND CHEMICAL PROPERTIES

Physical and Chemical Properties

Density 8.26 lb/gal
% Solids By Weight N/A
Density VOC 1.61 lb/gal
% VOC 19.47%
Specific Gravity 0.99

Amber Liquid Appearance Odor Threshold N/A Odor Description Low рΗ N/A Water Solubility Slight Flammability N/A Flash Point Symbol N/A Flash Point (PMCC) 185 °F Viscosity N/A Lower Explosion Level N/A Upper Explosion Level N/A Vapor Pressure N/A Vapor Density N/A < 32 °F Freezing Point Melting Point N/A Low Boiling Point 200 °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, freezing and contact with incompatible materials.

Do not mix with oxidizers or epoxy resins in quantities over 1%.

Hazardous Reactions/Polymerization:

Will not occur

Incompatible Materials:

Do not expose to strong oxidizing agents and acids.

Hazardous Decomposition Products:

Oxides of carbon and nitrogen.

SECTION 11) TOXICOLOGICAL INFORMATION

Likely Route of Exposure:

Ingestion, skin absorption

Skin Corrosion/Irritation:

Causes severe skin burns and eye damage

Serious Eye Damage/Irritation:

Causes serious eye damage

Respiratory/Skin Sensitization:

May cause allergy or asthma symptoms or breathing difficulties if inhaled

Germ Cell Mutagenicity:

No data available

Carcinogenicity:

Suspected of causing cancer.

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:

No data available

Acute Toxicity:

No data available

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0000111-40-0 DIETHYLENE TRIAMINE
LD50 (oral, rat): 1080 mg/kg body weight (1)
LD50 (oral, rat): 1800 mg/kg body weight (2)
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LD50 (oral, rat): 2330 mg/kg body weight (3) LD50 (dermal, rabbit): 1046 mg/kg (1090 mL/kg) (3)

LD50 (dermal, guinea pig): 163 mg/kg (170 mL/kg) (4-day appl

0000098-00-0 FURFURYL ALCOHOL

LC50 (rat): 85 ppm (exposure duration not reported) (2); 233 ppm; 4-hour exposure (1)

LC50 (mouse): 397 ppm (exposure duration not reported) (2)

LD50 (oral, rat): 132 mg/kg; 275 mg/kg (1) LD50 (dermal, rabbit): 657 mg/kg (2)

SECTION 12) ECOLOGICAL INFORMATION

Toxicity:

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.

The generation of waste should be avoided or minimized wherever possible.

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.

Chemical additions, processing, storage, or otherwise altering this material may make the waste management information presented in this SDS incomplete, inaccurate or otherwise inappropriate. Waste characterization and disposal compliance is the responsibility solely of the party generating the waste or deciding to discard or dispose of the material.

SECTION 14) TRANSPORT INFORMATION

U.S. DOT Information:

UN number: UN2922

Proper shipping name: Corrosive liquids, toxic, n.o.s. (4-Nonylphenol, DIETHYLENE TRIAMINE, FURFURYL ALCOHOL)

Hazard class: 8

Packaging group: II

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: UN2922

Proper shipping name: Corrosive liquids, toxic, n.o.s. (4-Nonylphenol, DIETHYLENE TRIAMINE, FURFURYL ALCOHOL)

Hazard class: 8 Packaging group: II

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

IATA Information:

UN number: UN2922 Hazard class: 8 Packaging group: II

Proper shipping name: Corrosive liquids, toxic, n.o.s. (4-Nonylphenol, DIETHYLENE TRIAMINE, FURFURYL ALCOHOL)

Note / Special Provision: No data available

SECTION 15) REGULATORY INFORMATION

| CAS | Chemical Name | % By Weight | Regulation List |
|--------------|---------------------|-------------|---|
| 0000098-00-0 | FURFURYL ALCOHOL | | SARA312,VOC,TSCA,CA_Prop65 - California Proposition 65,CA_Prop65_Type_Toxicity_Cancer - CA_Proposition65_Type_Toxicity_Cancer |
| 0000104-40-5 | 4-Nonylphenol | 0.0% - 15% | SARA313, SARA312,TSCA |
| 0000111-40-0 | DIETHYLENE TRIAMINE | 0.0% - 5% | SARA312,VOC,TSCA |

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

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