

TECHNICAL DATA SHEET

DESCRIPTION:

MRAP-SFC provides a professional solution to concrete flooring issues. With its fast cure, low odor and viscosity properties it is ideal for treating new or existing floors where high moisture levels are present. Enjoy deeper penetration of the substrate providing superior adhesion as well as increased protection against future water drive throughs when compared with traditional epoxy products – all in one coat!

RECOMMENDED USES:

Our product is the ideal choice for an expansive variety of applications. It offers unparalleled moisture-blocking capabilities, making it perfect for areas such as mechanical rooms, shop floors and pharmaceutical plants; Additionally our technology can be used under any coatings that show concrete contamination or underneath various floorings including carpet, wood and vinyl. Furthermore this multi-purpose solution provides enhanced protection in specialities areas like laboratories animal care facilities loading docks retail stores institution buildings multiple unit housing & more!

ADVANTAGES:

This groundbreaking product provides unparalleled protection for concrete slabs as it boasts a 100% solid solution that is low VOC and odor, has vapor control capacity in high moisture or pH environments, serves as a one-coat inhibitor to stop excess moisture from seeping through the surface of your slab. Additionally, its excellent adhesion properties help keep any applied coating firmly anchored while boasting standard drying times. Finally this revolutionary answer incorporates insightfully designed viscosity levels tailored specifically to reach deeper into even the most difficult subsurface areas!

SURFACE PREPARATION:

CHECK FOR MOISTURE: Before installing this floor-coating material, it is essential that the concrete substrate be completely dry. Moisture testing must occur to ensure Calcium chloride or "In-situ" Relative Humidity readings remain below a predetermined threshold for safe installation of BallistiX systems on concrete substrates.

CHECK THE TEMPERATURE & HUMIDITY: It's essential to check the temperature and humidity before proceeding with a coat. Floor temperatures should be in the range of 65–90°F (18–32°C), while humidities must remain below 95%. It is especially important not to apply coating until floor temps are at least 5o F above dew point!

SURFACE PREPARATION: To optimize performance, this product requires proper surface preparation. The substrate must feature the appropriate mechanical profile for the application (as stated in ASTM 4259–83), and be free from contaminants with no visible defects or moisture present.

APPLICATION EQUIPMENT: Equip yourself with the right tools to complete any project – a 3" disposable brush, low speed drill (450 rpm) equipped with a dynamic 3.5" jiffler blade and perfect-finish nap of around three eighths inches.

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MIXING:

To create a uniform consistency, mix the two portions of your 3 gallon kit separately and at temperatures between 70°F - 80° F (20-25 °C). When both components are prepped, add Side B into Side A in a bucket sized for 3.5 gallons to amalgamate them thoroughly until no streaking is observed--thinning should be avoided here! Remember that precise measurements of each side will guarantee optimal product performance; trotting from one container to another during mixing is an effective way of guaranteeing complete combination. All you need now? Just 2 minutes and voila!

APPLICATION:

After carefully blending all ingredients, expertly pour the mixture onto a flat surface. Use a squeegee to ensure its even distribution and use a wet-film thickness gauge to get your desired effect. To complete the look, utilize both back-rolling and cross rolling techniques before allowing it to dry for 4 hours minimum prior to any additional coats being applied.

TECHNICAL DATA

PACKAGING	3 gallons
COLOR	Clear
RECOMMENDED THICKNESS	16 mils 100 ft ² /gal
SHELF LIFE	Parts A and B: 12 months in original unopened factory sealed containers. Protect from freezing. Part C: 6 months in original unopened packaging. Store dry between 50-110°F (10-44°C).
MIX RATIO	Mix full units only
POT LIFE	10 - 15 minutes
VOC (G/L)	<5 g/l
APPLICATION TEMPERATURE	45°F (7°C) min. / 86°F (30°C) max.
SERVICE TEMPERATURE	-40°F (-40°C) min. / 248°F (120°C) max.

PROPERTIES

@ 73°F (23°C) AND 50% R.H.

DENSITY	9.0 lb/ga
VISUAL APPEARANCE	High Gloss
CURING DETAILS	4h

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THINNER RECOMMENDED	Xylene
SOFTENING POINT	266°F (130°C)
ABRASION RESISTANCE, ASTM D4060 TABER ABRASER CS-17 WHEEL / 1000G (2.2 LBS.) / 1000 CYCLES	30 mg loss
BOND STRENGTH, ASTM D4541	> 1.9 MPa (275 psi) (substrate failure)
COEFFICIENT OF THERMAL EXPANSION ASTM D696	0.89x10 ⁻⁵ in/in/°F (1.6x10 ⁻⁵ mm/mm/°C)
TENSILE STRENGTH D2370	7500 psi
WATER ABSORPTION ASTM C413	<0.1%
IMPACT RESISTANCE	160 in/lb
RESISTANCE TO MOLD GROWTH, ASTM D3273	Rated 10 (highest resistance)
RESISTANCE TO FUNGI GROWTH, ASTM G21	Rated 0 (no growth)
HARDNESS, SHORE D	70-80
FLOW	325 mm (12.80 in)
COEFFICIENT OF FRICTION, ASTM D2047	0.7 smooth
INDENTATION MIL-PRF-24613	0%
THERMAL COMPATIBILITY, ASTM C884	Pass
COMPRESSION ASTM S695	10000 psi
FLEXURAL STRENGTH ASTM C580	16.2 MPa (2350 psi)

* Times are approximate and will be affected by changing ambient conditions, especially changes in temperature and relative humidity.

* The indicated mileage is calculated for flat surfaces. A porous or imperfect surface will require more material in order to cover the same mileage. *

HEALTH & SAFETY:

Components A, B, and C of this product contain toxic ingredients that may provoke serious health risks upon contact. In case of skin or eye contact with any part of this product it is recommended to wash thoroughly with water and soap for at least 15 minutes respectively. Inhalation and prolonged exposure can cause severe burns on body parts as well respiratory problems; in such circumstances fresh air should be provided immediately while removing contaminated clothes prior them being reused again after cleaning. For best precautionary measures always wear chemical resistant gloves alongside protective eyewear when using this strong sensitizer as vapors emitted from its use might be dangerous if inhaled without protection equipment like a NIOSH/MSHA approved breathing apparatus filtering organic vapors suitable ventilation must also be predicted beforehand.

NOTICE:

BallistiX strives to provide the most accurate materials and information for our users. Our technology is only applicable in combination with specific material designated herein, so please verify suitability of this product prior to use.

SECTION 1 IDENTIFICATION

Product identifier	MRAP A
Other means of identification	None
Recommended use and restrictions on use	Construction product / Refer to technical information
Initial supplier identifier	Meghan's Supply & Design // BallistiX 11720 Main St Suite 120, Fredericksburg, VA 22408, United States +1540-940-6698
Emergency telephone number/restriction on use	USA - INFOTRAC - 24 Hour Number 1800-535-5053

SECTION 2 HAZARD IDENTIFICATION

Classification of hazardous product (name of the category or subcategory of the hazard class)	Skin Sensitizer Category 1B Chronic aquatic toxicity Category 2 Acute aquatic toxicity Category 3 Acute toxicity Dermal Category 5
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Information elements

(symbols, signal words, hazard statements and precautionary statements of the category/subcategory)



DANGER

H313 May be harmful in contact with skin
H317 May cause an allergic skin reaction
H402 Harmful to aquatic life
H411 Toxic to aquatic life with long lasting effects

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. **P261** Avoid breathing dust/fume/gas/mist/vapors/spray. **P272** Contaminated work clothing should not be allowed out of the workplace. **P280** Wear protective gloves/protective clothing/eye protection/face protection. **P273** Avoid release to the environment. **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. **P391** Collect spillage. **P312** Call a POISON CENTER/doctor if you feel unwell. **P501** Dispose of contents/ container to an approved waste disposal plant.

Other Hazards Known	None
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SAFETY DATA SHEET PART A

SECTION 3 COMPOSITION/INFORMATION ON INGREDIENTS

Chemical name (common name/synonyms)	CAS NUMBER or other	Concentration (%)
BISPHENOL A EPOXY RESIN	0025085-99-8	47 - 86
BISPHENOL F EPOXY RESIN	0028064-14-4	9 - 17
ETHYL HEXYL GLYCIDYL ETHER, 2-	0002461-15-6	8 - 14
BENZYL ALCOHOL	0000100-51-6	2 - 4
DIPROPYLENE GLYCOL METHYL ETHER ACETATE	0088917-22-0	17 - 3

All ingredients are listed according to OSHA (29 CFR).

* Statement This safety data sheet provides concentration range(s) instead of the actual concentration(s) considered trade secret(s).

SECTION 4 FIRST AID MEASURES

Inhalation	IF INHALED: Remove person to fresh air and keep comfortable for breathing. If exposed/feel unwell/concerned: Call a POISON CENTER/doctor.
Ingestion	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. NEVER give anything by mouth if victim is rapidly losing consciousness, or is unconscious or convulsing. Rinse mouth thoroughly with water. Have victim drink two glasses of water. If vomiting occurs naturally, have victim lean forward to reduce risk of aspiration. Call a doctor if you feel unwell.
Skin contact	IF ON SKIN: wash with plenty of water (15-20 minutes). IF SKIN irritation or rash occurs: Get medical attention. Take off contaminated clothing and wash it before reuse.
Eye contact	IF IN EYES, Rinse cautiously with water for several minutes (15-20). Remove contact lenses, if present and easy to do. Continue rinsing.
Most important symptoms and effects (acute and delayed)	Causes severe skin, respiratory or digestive tract burns and eye damage.
Indication of immediate medical attention/special treatment	In all cases, call a doctor. Do not forget this document.

SECTION 5 FIREFIGHTING MEASURES

Specific hazards of the hazardous product (hazardous combustion products)	Excessive pressure or temperature may cause explosive rupture of containers.
Suitable and unsuitable extinguishing media	In case of fire: Use carbon dioxide, chemical powder agent and appropriate foam to extinguish surrounding products.
Special protective equipment and precautions for fire-fighters	During a fire, irritating/toxic smoke and fumes may be generated. Do not enter fire area without proper protection. Firefighters should wear proper protective equipment and self-contained breathing apparatus with full facepiece. Shield personnel to protect from venting, rupturing or bursting cans. Move containers from fire area if it can be done without risk. Water spray may be useful in cooling equipment and cans exposed to heat and flame.

SECTION 6 ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures	Absorb spillage to prevent material-damage. Restrict access to area until completion of clean-up. Ensure clean-up is conducted by trained personnel only. All persons dealing with clean-up should wear the appropriate protective equipment (See Section 8).
Methods and materials for containment and cleaning up	Ventilate area of release. Stop the leak if it can be done safely. Contain and absorb any spilled liquid concentrate with inert absorbent material, then place material into a container for later disposal (see Section 13). Contaminated absorbent material may pose the same hazards as the spilled product. Notify the appropriate authorities as required.

SAFETY DATA SHEET PART A

SECTION 7 HANDLING AND STORAGE

Precautions for safe handling	Wear protective gloves/ protective clothing/ eye protection/ face protection. Before handling, it is very important that engineering controls are operating, and that protective equipment requirements and personal hygiene measures are being followed. People working with this chemical should be properly trained regarding its hazards and its safe use. Inspect containers for leaks before handling. Label containers appropriately. Ensure proper ventilation. Avoid breathing dust/fume/gas/mist/vapors/spray. Avoid contact with eyes, skin and clothing. Keep away from heat, sparks and flame. Avoid generating high concentrations of dusts, vapors or mists. Keep away from incompatible materials (Section 10). Keep containers closed when not in use. Empty containers are always dangerous. Refer also to Section 8.
Conditions for safe storage, including any incompatibilities	Store in a well-ventilated place. Keep container tightly closed. Keep cool. Store locked up. Store away from incompatible materials (Section 10). Inspect all incoming containers to make sure they are properly labelled and not damaged. Storage area should be clearly identified, clear of obstruction and accessible only to trained personnel. Inspect periodically for damage or leaks.

SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

Control Parameters (biological limit values or exposure limit values and source of those values)	Exposure limits: None known
Appropriate engineering controls	Use under well-ventilated conditions. Local exhaust ventilation system is recommended to maintain concentrations of contaminants below exposure limits. Make emergency eyewash stations, safety/quick-drench showers, and washing facilities available in work area.
Individual protection measures/personal protective equipment	Respiratory protection is required if the concentrations are higher than the exposure limits. Use a NIOSH approved respirators if the exposure limits are unknown. Chemically protective gloves (impervious), and other protective clothing to prevent prolonged or repeated skin contact, must be worn during all handling operations. Wear protective chemical splash goggles to prevent mists from entering the eyes. Wash hands/nails/face thoroughly after handling. Do not eat, drink or smoke when using this product. Practice good personal hygiene after using this material. Remove and wash contaminated work clothing before re-use.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Appearance / color	Clear liquid	vapor pressure	Not available
odor	Odorless	vapor density	Not available
odor threshold	Not available	Relative density	9.35 lb/gal
pH	Not available	Solubility	Not available
Melting point / Freezing point	Not available	Partition coefficient of n-octanol/water	Not available
Initial boiling point/ranges	Not available	Auto-ignition temperature	Not available
Flash point	> 199.4°F (93°C)	Decomposition temperature	Not available
Evaporation rate	Not available	Viscosity	Not available
Flammability (solid, gas)	Not available	VOC	0.47 lb/gal
Upper/Lower flammability or explosive limits	Not available	Other	None know

SAFETY DATA SHEET

PART A

SECTION 10 STABILITY AND REACTIVITY

Reactivity	Does not react under the recommended storage and handling conditions prescribed.
Chemical Stability	Stable under the recommended storage and handling conditions prescribed.
Possibility of hazardous reactions	None known
Conditions to avoid (static discharge, shock or vibration)	Heat, high temperature, open flame, sparks, and moisture. Contact with incompatible materials in a closed system will cause buildup of pressure.
Incompatible materials	Oxidizing materials; etc.
Hazardous decomposition products	Combustion products: organic vapors and thermal decomposition fragments.

SECTION 11 TOXICOLOGICAL INFORMATION

Information on the likely routes of exposure (inhalation, ingestion, skin and eye contact)	May be harmful if swallowed. Causes skin irritation. Causes serious eye irritation. May cause an allergic skin reaction.
Symptoms related to the physical, chemical and toxicological characteristics	Skin irritation, redness, stinging, pain; Eye irritation, redness, tearing;
Delayed and immediate effects (chronic effects from short-term and long-term exposure)	Skin Sensitization – Possible; Respiratory Sensitization – Exposure may cause mucous membrane and respiratory tract irritation, tightness of chest, headache, shortness of breath, and a dry cough. The effects of acute exposure may be delayed in onset up to 12–24 hours. Repeated exposure above current occupational limits may cause an allergic sensitization of the respiratory tract. This is characterized by an asthma-like response upon re-exposure to the chemical. The symptoms may include coughing, wheezing, shortness of breath and chest tightness. May cause an allergic skin reaction; Germ Cell Mutagenicity – No data available; Carcinogenicity – No ingredient listed by IARC, ACGIH, NTP or OSHA; Reproductive Toxicity – No data available; Specific Target Organ Toxicity – Single Exposure – No data available; Specific Target Organ Toxicity – Repeated Exposure – Repeated exposure generally aggravates the following medical conditions : Cardiovascular disease and Chronic respiratory disease.; Aspiration Hazard – No data available; Health Hazards Not Otherwise Classified – No data available.
Acute toxicity	Ingestion : Irritation or chemical burns of the mouth, pharynx, esophagus and stomach can develop following ingestion. 0000100–51–6BENZYL ALCOHOL; LC50(Inhalation, rat): >500 mg/m3; Toxic effects: Behavioral –somnolence (general depressed activity) Behavioral – ataxia Lungs, Thorax, or Respiration –respiratory depression; LD50(Dermal, rabbit): 2000 mg/kg; LD50(Oral, rat): 1230 mg/kg; Toxic effects: Behavioral –somnolence (general depressed activity) Behavioral –excitement Behavioral –coma

SECTION 12 ECOLOGICAL INFORMATION

Ecotoxicity (aquatic and terrestrial information)	Harmful to aquatic life. Toxic to aquatic life with long lasting effects
Persistence and degradability	No data available
Bioaccumulative potential	No data available
Mobility in soil	No data available.
Other adverse effects	No data available

SECTION 13 DISPOSAL CONSIDERATIONS

Information on safe handling for disposal/methods of disposal/contaminated packaging
 Dispose of contents/container into safe container in accordance with local, regional or national regulations.

SAFETY DATA SHEET PART A

SECTION 14 TRANSPORT INFORMATION

UN number; Proper shipping name; Class(es); Packing group (PG) of the TDG Regulations:

UN3082; ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.(EPOXY RESIN); CLASS 9; PG III

UN Number; Proper shipping name; Class(es); Packing group (PG) of the IMDG (maritime):

UN3082; ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.(EPOXY RESIN); CLASS 9; PG III

UN Number; Proper shipping name; Class(es); Packing group (PG) of the IATA (air):

UN3082; ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.(EPOXY RESIN); CLASS 9; PG III

Special Precautions (transport/conveyance): May also be shipped as a LIMITED QUANTITY in accordance with TDG.

Environmental hazards (IMDG or other): Marine Pollutant

Bulk transport (usually more than 450L in capacity): Possible

SECTION 15 REGULATORY INFORMATION

Safety/health regulations specifics	Refer to Section 2 for the appropriate classification. This product has been classified in accordance with the hazard criteria of the Hazardous Products Regulations (HPR).
Environmental regulations specifics	Refer to Section 3 for ingredient(s) of the DSL.
Safety/health/environmental outside regulations specifics	United States OSHA information: This product is regulated according to OSHA (29 CFR).
Bioaccumulative potential	United States EPA (Environmental Protection Agency) information: 40 CFR Refer to the ingredients listed in Section 3 & Sections 12; 13 & 14. United States TCSA information: Refer to the ingredients listed in Section 3.
National Fire Protection Association (NFPA)	HEALTH: 3 FLAMMABILITY: 1 INSTABILITY: 0 SPECIAL HAZARDS: Refer to Section 2 & 3. HAZARD SCALE: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

SECTION 16 OTHER INFORMATION

Date of the latest revision of the safety data sheet	June 16, 2022 version 2
Corrections	SDS Template modifications
References	Safety Data Sheets from manufacturer/supplier
Abbreviations	<p>ACGIH American Conference of Governmental Industrial Hygienists</p> <p>ATE Acute toxicity estimate</p> <p>CAS Chemical Abstract Service</p> <p>DSL Domestic Substance List</p> <p>IARC International Agency for Research on Cancer</p> <p>IATA International Air Transport Association</p> <p>IMDG International Maritime Dangerous Goods Code</p> <p>LC Lethal concentration</p> <p>LD Lethal Dosage</p> <p>NIOSH National Institute for Occupational Safety and Health</p> <p>NTP National Toxicology Program (U.S.A.)</p> <p>OSHA Occupational Safety and Health Administration (U.S.A.)</p> <p>PEL Permissible Exposure Limit</p> <p>STEL Short-term Exposure Limit</p> <p>TDG Transport of dangerous goods in</p> <p>TLV Threshold Limit Value</p> <p>TSCA Toxic Substances Control Act</p> <p>TWA Time Weighted Average</p> <p>WHMIS Workplace Hazardous Materials Information System</p>

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.

SAFETY DATA SHEET PART B

SECTION 1 - IDENTIFICATION

Product identifier	MRAP-SFC B
Other means of identification	None
Recommended use and restrictions on use	Construction product / Refer to technical information
Initial supplier identifier	Meghan's Supply & Design // BallistiX 11720 Main St Suite 120, Fredericksburg, VA 22408, United States +1540-940-6698
Emergency telephone number/restriction on use	USA - INFOTRAC - 24 Hour Number 1800-535-5053

SECTION 2 - HAZARD IDENTIFICATION

Classification of hazardous product (name of the category or subcategory of the hazard class)	Acute aquatic toxicity -Category 2 Acute toxicity Dermal -Category 5 Acute toxicity Oral -Category 4 Chronic aquatic toxicity -Category 2 Reproductive Toxicity -Category 1B Serious Eye Damage -Category 1 Skin Corrosion -Category 1B Skin Sensitizer -Category 1 Specific Target Organ Toxicity -Repeated Exposure -Category 2
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Information elements
(symbols, signal words, hazard statements and precautionary statements of the category/subcategory)



H302 Harmful if swallowed
H313 May be harmful in contact with skin
H360 May damage fertility or the unborn child.
H318 Causes serious eye damage
H314 Causes severe skin burns and eye damage
H317 May cause an allergic skin reaction
H373 May cause damage to organs through prolonged or repeated exposure.

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. **P273** Avoid release to the environment. **P264** Wash thoroughly after handling. **P270** Do not eat, drink or smoke when using this product. **P201** Obtain special instructions before use. **P202** Do not handle until all safety precautions have been read and understood. **P280** Wear protective gloves/protective clothing/eye protection/face protection. **P260** Do not breathe dust/fume/gas/mist/vapors/spray. **P261** Avoid breathing dust/fume/gas/mist/vapors/spray. **P272** Contaminated work clothing should not be allowed out of the workplace. **P312** Call a POISON CENTER/doctor if you feel unwell. **P301 +P312** IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell. **P330** Rinse mouth. **P391** Collect spillage. **P308 +P313** IF exposed or concerned: 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. **P310** Immediately call a POISON CENTER or doctor. **P301 +P330 +P331** IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. **P303 +P361 +P353** IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower]. **P363** Wash contaminated clothing before reuse. **P304 +P340** IF INHALED: Remove person to fresh air and keep comfortable for breathing. **321** Specific treatment (see section 4 on this SDS). **P302 +P352** IF ON SKIN: Wash with plenty of water. **P333 +P313** If skin irritation or a rash occurs: Get medical advice/attention. **P362 +P364** Take off contaminated clothing. And wash it before reuse. **P314** Get Medical advice/attention if you feel unwell. **H401** Toxic to aquatic life. **H411** Toxic to aquatic life with long lasting effects **P405** Store locked up. **P501** Dispose of contents/ container to an approved waste disposal plant.

Other Hazards Known None

SAFETY DATA SHEET PART B

SECTION 3 – COMPOSITION/INFORMATION ON INGREDIENTS

Chemical name (common name/synonyms)	CAS NUMBER or other	Concentration (%)
CYCLOALIPHATIC AMINE	Secret	39 – 72
EPOXY POLYAMINE ADDUCT	N/A	12 – 22
PARATERTIARYBUTYLPHENOL	0000098-54-4	8 – 15
ISOPHORONEDIAMINE	0002855-13-2	8 – 14
4-NONYLPHENOL BRANCHED	0084852-15-3	17 – 3
POLYOXYPROPYLENEDIAMINE	0009046-10-0	14 – 2

All ingredients are listed according to OSHA (29 CFR).

* Statement – This safety data sheet provides concentration range(s) instead of the actual concentration(s) considered trade secret(s).

SECTION 4 – FIRST AID MEASURES

Inhalation	IF INHALED: Remove source of exposure or move person to fresh air and keep comfortable for breathing. If exposed/feel unwell/concerned: Call a POISON CENTER/doctor.
Ingestion	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. NEVER give anything by mouth if victim is rapidly losing consciousness, or is unconscious or convulsing. Rinse mouth thoroughly with water. Have victim drink two glasses of water. If vomiting occurs naturally, have victim lean forward to reduce risk of aspiration. Call a doctor if you feel unwell.
Skin contact	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water (15–20 minutes). Wash contaminated clothing before reuse.
Eye contact	IF IN EYES, Rinse cautiously with water for several minutes (15–20). Remove contact lenses, if present and easy to do. Continue rinsing.
Most important symptoms and effects (acute and delayed)	Causes severe skin, respiratory or digestive tract burns and eye damage.
Indication of immediate medical attention/special treatment	In all cases, call a doctor. Do not forget this document.

SECTION 5 – FIREFIGHTING MEASURES

Specific hazards of the hazardous product (hazardous combustion products)	Carbon oxides and other irritant/toxic gases and fumes.
Suitable and unsuitable extinguishing media	In case of fire: Use carbon dioxide, chemical powder agent and appropriate foam to extinguish surrounding products.
Special protective equipment and precautions for fire-fighters	During a fire, irritating/toxic smoke and fumes may be generated. Do not enter fire area without proper protection. Firefighters should wear proper protective equipment and self-contained breathing apparatus with full facepiece. Shield personnel to protect from venting, rupturing or bursting cans. Move containers from fire area if it can be done without risk. Water spray may be useful in cooling equipment and cans exposed to heat and flame.

SECTION 6 – ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures	Absorb spillage to prevent material damage. Restrict access to area until completion of clean-up. Ensure clean-up is conducted by trained personnel only. All persons dealing with clean-up should wear the appropriate protective equipment (See Section 8).
Methods and materials for containment and cleaning up	Ventilate area of release. Stop the leak if it can be done safely. Contain and absorb any spilled liquid concentrate with inert absorbent material, then place material into a container for later disposal (see Section 13). Contaminated absorbent material may pose the same hazards as the spilled product. Notify the appropriate authorities as required.

SAFETY DATA SHEET PART B

SECTION 7 – HANDLING AND STORAGE

Precautions for safe handling	Wear protective gloves/ protective clothing/ eye protection/ face protection. Before handling, it is very important that engineering controls are operating, and that protective equipment requirements and personal hygiene measures are being followed. People working with this chemical should be properly trained regarding its hazards and its safe use. Inspect containers for leaks before handling. Label containers appropriately. Ensure proper ventilation. Avoid breathing dust/fume/gas/mist/vapors/spray. Avoid contact with eyes, skin and clothing. Keep away from heat, sparks and flame. Avoid generating high concentrations of dusts, vapors or mists. Keep away from incompatible materials (Section 10). Keep containers closed when not in use. Empty containers are always dangerous. Refer also to Section 8.
Conditions for safe storage, including any incompatibilities	Store in a well-ventilated place. Keep container tightly closed. Keep cool. Store locked up. Store away from incompatible materials (Section 10). Inspect all incoming containers to make sure they are properly labelled and not damaged. Storage area should be clearly identified, clear of obstruction and accessible only to trained personnel. Inspect periodically for damage or leaks.

SECTION 8 – EXPOSURE CONTROLS/PERSONAL PROTECTION

Control Parameters (biological limit values or exposure limit values and source of those values)	Exposure limits: None known
Appropriate engineering controls	Use under well-ventilated conditions. Local exhaust ventilation system is recommended to maintain concentrations of contaminants below exposure limits. Make emergency eyewash stations, safety/quick-drench showers, and washing facilities available in work area.
Individual protection measures/personal protective equipment	Respiratory protection is required if the concentrations are higher than the exposure limits. Use a NIOSH approved respirator if the exposure limits are unknown. Chemically protective gloves (impervious), and other protective clothing to prevent prolonged or repeated skin contact, must be worn during all handling operations. Wear protective chemical splash goggles to prevent mists from entering the eyes. Wash hands/nails/face thoroughly after handling. Do not eat, drink or smoke when using this product. Practice good personal hygiene after using this material. Remove and wash contaminated work clothing before re-use.

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

Appearance / color	Light yellow liquid	vapor pressure	Not available
odor	Characteristic	vapor density	Not available
odor threshold	Not available	Relative density	Not available
pH	Not available	Solubility	Not available
Melting point / Freezing point	Not available	Partition coefficient of n-octanol/water	Not available
Initial boiling point/ranges	Not available	Auto-ignition temperature	Not available
Flash point	100°C	Decomposition temperature	Not available
Evaporation rate	Not available	Viscosity	Not available
Flammability (solid, gas)	Not available	VOC	Not available
Upper/Lower flammability or explosive limits	Not available	Other	None know

SAFETY DATA SHEET

PART B

SECTION 10 – STABILITY AND REACTIVITY

Reactivity	Does not react under the recommended storage and handling conditions prescribed.
Chemical Stability	Stable under the recommended storage and handling conditions prescribed.
Possibility of hazardous reactions	None known
Conditions to avoid (static discharge, shock or vibration)	Heat, high temperature, open flame, sparks, and moisture. Contact with incompatible materials in a closed system will cause buildup of pressure.
Incompatible materials	This product will react with epoxies, isocyanates, and strong oxidizing agents.
Hazardous decomposition products	Combustion products: organic vapors and thermal decomposition fragments.

SECTION 11 – TOXICOLOGICAL INFORMATION

Information on the likely routes of exposure (inhalation, ingestion, skin and eye contact)	Causes severe skin burns and eye damage. Any contact should not be left untreated. Causes serious eye damage. Exposure may cause mucous membrane and respiratory tract irritation, tightness of chest, headache, shortness of breath, and a dry cough. The effects of acute exposure may be delayed in onset up to 12–24 hours. Repeated exposure above current occupational limits may cause an allergic sensitization of the respiratory tract. This is characterized by an asthma-like response upon re-exposure to the chemical. The symptoms may include coughing, wheezing, shortness of breath and chest tightness. May cause an allergic skin reaction
Symptoms related to the physical, chemical and toxicological characteristics	Skin burn, redness, stinging, pain; Eye burn, redness, tearing; Digestive tract burn; Respiratory tract burn, coughing, shortness of breath, dizziness, drowsiness, nausea and headaches.
Delayed and immediate effects (chronic effects from short-term and long-term exposure)	Skin Sensitization – Possible; Respiratory Sensitization – No data available; Germ Cell Mutagenicity – No data available; Carcinogenicity – No ingredient listed by IARC, ACGIH, NTP or OSHA; Reproductive Toxicity – May damage fertility or the unborn child; Specific Target Organ Toxicity — Single Exposure – No data available; Specific Target Organ Toxicity — Repeated Exposure – generally aggravates the following medical conditions : Cardiovascular disease and Chronic respiratory disease. May cause damage to organs through prolonged or repeated exposure.; Aspiration Hazard – No data available; Health Hazards Not Otherwise Classified – No data available.
Acute Toxicity	If ingested : In humans, irritation or chemical burns of the mouth, pharynx, esophagus and stomach can develop following ingestion, and injury may be severe and cause death. May be harmful in contact with skin Harmful if swallowed. 0009046–10–0POLYOXYPROPYLENEDIAMINE; LD50 (dermal, rabbit): 2090 mg/kg (based on raw material SDS); LD50 (oral, rat): 480 mg/kg (based on raw material SDS); 0002855–13–2 ISOPHORONEDIAMINE ; LD50 (rat, oral): 1,030 mg/kg (based on raw material SDS)

SECTION 12 – ECOLOGICAL INFORMATION

Ecotoxicity (aquatic and terrestrial information)	Toxic to aquatic life. Toxic to aquatic life with long lasting effects
Persistence and degradability	No data available
Bioaccumulative potential	No data available.
Mobility in soil	No data available.
Other adverse effects	No data available.

SECTION 13 – DISPOSAL CONSIDERATIONS

Information on safe handling for disposal/methods of disposal/contaminated packaging
Dispose of contents/container into safe container in accordance with local, regional or national regulations.

SAFETY DATA SHEET PART B

SECTION 14 – TRANSPORT INFORMATION

UN number; Proper shipping name; Class(es); Packing group (PG) of the TDG Regulations:
UN2735; UN Proper Shipping Name: AMINES, LIQUID, CORROSIVE, N.O.S.(ISOPHORONEDIAMINE); CLASS 8; PG III

UN Number; Proper shipping name; Class(es); Packing group (PG) of the IMDG (maritime):
UN2735; UN Proper Shipping Name: AMINES, LIQUID, CORROSIVE, N.O.S.(ISOPHORONEDIAMINE); CLASS 8; PG III

UN Number; Proper shipping name; Class(es); Packing group (PG) of the IATA (air):
UN2735; UN Proper Shipping Name: AMINES, LIQUID, CORROSIVE, N.O.S.(ISOPHORONEDIAMINE); CLASS 8; PG III

Special Precautions (transport/conveyance): None

Environmental hazards (IMDG or other): Marine Pollutant

Bulk transport (usually more than 450L in capacity): Possible

SECTION 15 – REGULATORY INFORMATION

Safety/health regulations specifics	Refer to Section 2 for the appropriate classification. This product has been classified in accordance with the hazard criteria of the Hazardous Products Regulations (HPR).
Environmental regulations specifics	Refer to Section 3 for ingredient(s) of the DSL
Safety/health/environmental outside regulations specifics Bioaccumulative potential	United States OSHA information: This product is regulated according to OSHA (29 CFR). United States EPA (Environmental Protection Agency) information: 40 CFR Refer to the ingredients listed in Section 3 & Sections 12; 13 & 14. United States TCSA information: Refer to the ingredients listed in Section 3.
National Fire Protection Association (NFPA)	HEALTH: 3 FLAMMABILITY: 1 INSTABILITY: 0 SPECIAL HAZARDS: Refer to Section 2 & 3. HAZARD SCALE: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

SECTION 16 – OTHER INFORMATION

Date of the latest revision of the safety data sheet	June 16, 2022 version 2
Corrections	SDS Template modifications
References	Safety Data Sheets from manufacturer/supplier
Abbreviations	<p>ACGIH American Conference of Governmental Industrial Hygienists</p> <p>ATE Acute toxicity estimate</p> <p>CAS Chemical Abstract Service</p> <p>DSL Domestic Substance List</p> <p>IARC International Agency for Research on Cancer</p> <p>IATA International Air Transport Association</p> <p>IMDG International Maritime Dangerous Goods Code</p> <p>LC Lethal concentration</p> <p>LD Lethal Dosage</p> <p>NIOSH National Institute for Occupational Safety and Health</p> <p>NTP National Toxicology Program (U.S.A.)</p> <p>OSHA Occupational Safety and Health Administration (U.S.A.)</p> <p>PEL Permissible Exposure Limit</p> <p>STEL Short-term Exposure Limit</p> <p>TDG Transport of dangerous goods in</p> <p>TLV Threshold Limit Value</p> <p>TSCA Toxic Substances Control Act</p> <p>TWA Time Weighted Average</p> <p>WHMIS Workplace Hazardous Materials Information System</p>

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.