

MM[®] Impact Dampening System

Aluminum Impact Dampening System (AID Series)

Galvanized Impact Dampening System (GID Series)

Stainless Impact Dampening System (SID Series)

The products listed below along with their corresponding Safety Data Sheets (SDS) are contained in this document:

- MM High Strength Epoxy
 - Part A
 - Part B

- Unitex Pro Poxy

Safety Data Sheet

According to 29CFR1910/1200 and GHS Rev.3

Effective date: 09.15.2015

MM High Strength Epoxy Part A

SECTION 1: Identification of the substance/mixture and of the supplier

Product name: MM High Strength Epoxy Part A

Manufacture/Supplier Trade Name:

Manufacture/Supplier Article Number:

Recommended uses of the product and restrictions on use: Concrete patching/bonding

Manufacturer Details:

MM Systems Corporation

50 MM Way

Pendergrass, GA 30567

(706)824-7500

Emergency telephone number:

Infotrac 800-535-5053

SECTION 2: Hazards Identification

Classification of the substance or mixture:



Irritant

Skin irritation, category 2

Eye irritation, category 2A

Skin sensitization, category 1



Environmentally Damaged

Chronic hazards to the aquatic environment, category 2

Signal word: Warning

Hazard statement:

Harmful if swallowed

Causes skin irritation

Causes serious eye irritation

Toxic to aquatic life with long lasting effects

Safety Data Sheet

According to 29CFR1910/1200 and GHS Rev.3

Effective date: 09.15.2015

MM High Strength Epoxy Part A

Precautionary statements:

Keep container tightly closed

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

Keep out reach of children

Read label before use

Avoid breathing dust/gas/mist/vapors/spray

Wash skin thoroughly after handling

Contaminated work clothing should not be allowed out of the workplace

Avoid release to the environment

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

IF ON SKIN: Wash with soap and water

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

Continue rinsing

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

Take off contaminated clothing and wash before reuse

Collect spillage

Store locked up

Dispose of contents and container as instructed in Section 13

Other Non-GHS Classification: none

SECTION 3: Composition/information on ingredients

Ingredients

CAS 25068-38-6	BISPHENOL-a-(EPICHLORHYDRIN) AND EPOXY RESIN	20-30%
CAS 2461-15-6	[[[2-ETHYLHEXYL]OXY]METHYL]OXIRANE	3-6%
CAS 13463-67-7	Titanium dioxide	2-3%
CAS 14808-60-7	Silicon dioxide	50-70%
CAS 12174-11-7	Attapulgate clay	6-8%

Percentages are by weight

SECTION 4: First aid measures

Description of first aid measures

After inhalation:

Safety Data Sheet

According to 29CFR1910/1200 and GHS Rev.3

Effective date: 09.15.2015

MM High Strength Epoxy Part A

Move exposed to fresh air. Give artificial respiration if necessary. If breathing is difficult give oxygen. Loosen clothing and place exposed in a comfortable position.

After skin contact:

Wash hands and exposed skin with soap and plenty of water.

After eye contact:

Seek medical attention. Protect unexposed eye. Flush exposed eye gently using water for 15-20 minutes

Remove contact lenses while rinsing

After swallowing:

Rinse mouth with water. Do not induce vomiting. Never give anything by mouth to an unconscious person. Seek medical attention

Most important symptoms and effects, both acute and delayed:

Shortness of breath, Headache, Nausea, Dizziness, Irritation-all routes of exposure. Acute pneumoconiosis or silicosis from overwhelming exposure to crystalline silica dust has occurred. Lungs may be affected by repeated or prolonged exposure to fibers, resulting in fibrosis. This substance is possible carcinogenic to humans. Persons with impaired respiratory function may be more susceptible to the effects of this substance. Smoking can increase the risk of lung injury.

Indication of an 7y immediate medical attention and special treatment needed

If seeking medical attention provide SDS document to physician. Physician should treat symptomatically.

SECTION 5: Firefighting measures

Extinguishing media

Suitable extinguishing agents:

Use water, dry chemical, chemical foam, carbon dioxide, or alcohol-resistant foam

Unsuitable extinguishing agents: None

Advice for firefighter:

Protective equipment: Wear protective eyewear, gloves, and clothing. Refer to section

Additional information (precautions)

Avoid inhaling gases, fumes, dust, mist, and aerosols. Avoid contact with skin, eyes and clothing

Safety Data Sheet

According to 29CFR1910/1200 and GHS Rev.3

Effective date: 09.15.2015

MM High Strength Epoxy Part A

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures:
Ensure adequate ventilation. Ensure that air-handling systems are operational

Environmental precautions:
Should not be released into environment. Prevent from reaching drains, sewer, or waterway

Methods and material for containment and cleaning up:
Soak up with inert absorbent material and dispose of as hazardous waste. Wear protective eyewear, gloves, and clothing. Refer to section 8. Always obey local regulations. If necessary use trained response staff or contractor. Evacuate personnel to safe areas. Containerize for disposal. Refer to section 13. Keep in suitable closed containers for disposal.
Reference to other sections: none

SECTION 7: HANDLING AND STORAGE

Precautions for safe handling;
Avoid contact with skin, eyes, and clothing. Follow good hygiene procedures when handling chemical materials. Refer to Section 8. Follow proper disposal methods. Refer to Section 13. Do not eat, drink, smoke, or use personal products when handling chemical substance.

Conditions for safe storage, including any incompatibilities:
Store in a cool location. Keep away from food and beverages. Protect from freezing and physical damage. Provide ventilation for containers. Keep container tightly sealed, Store away from incompatible materials

SECTION 8: Exposure controls/personal protection

Control Parameters: 13463-67-7, Titanium dioxide, ACGIH TLV: 10, OSHA PEL: 10

Appropriate Engineering controls: Emergency eye wash fountains and safety showers should be available in the immediate vicinity of use or handling. Provide exhaust ventilation or other engineering controls To keep the airborne concentrations of vapor and mist below the applicable workplace exposure limits indicated above. (Occupational Exposure-OELS)

Respiratory protection: Not required under normal conditions of use. Where risk Assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100

Safety Data Sheet

According to 29CFR1910/1200 and GHS Rev.3

Effective date: 09.15.2015

MM High Strength Epoxy Part A

Protection of skin: (US) or type P3 (EN143) respirator cartridges as a backup to engineering controls. When necessary use NIOSH approved breathing equipment. Select glove material impermeable and resistant to the substance. Select glove material based on rates of diffusion and degradation. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Use proper glove removal technique without touching outer service. Avoid skin contact with used gloves. Wear protective clothing.

Eye protection: Faceshield (8-inch minimum) with tightly fitting safety goggles are appropriate eyewear. Wear equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166 (EU)

General hygienic measures: Perform routine housekeeping. Wash hands before breaks and immediately after handling the product. Avoid contact with skin, eyes, and clothing. Before rewearing wash contaminated clothing.

SECTION 9: Physical and chemical properties

Appearance (physical State, color)	white, gritty paste	Explosion limit lower	Not determined
		Explosion limit upper	Not determined
Odor:	Slight sweet odor	Vapor pressure at 20⁰	Not determined
Odor threshold:	Not Determined	Vapor density	Not determined
PH-value:	Not Determined	Relative density	1.85
Melting/Freezing Point:	Not Determined	Solubilities	Insoluble in water
Boiling point/Range:	Not Determined	Partition coefficient (n-octanol/water)	Not determined
Flash point(closed cup):	Not Determined	Auto/self-ignition Temperature	Not determined
Evaporation rate:	Not Determined	Decomposition Temp	Not determined
Flammability (solid Gaseous)	Not Determined	Viscosity	a. Kinematic
			Not determined
			b. Dynamic:
			Not determined
Density at 20⁰	Not Determined		

SECTION 10: Stability and reactivity

Safety Data Sheet

According to 29CFR1910/1200 and GHS Rev.3

Effective date: 09.15.2015

MM High Strength Epoxy Part A

Reactivity:

Nonreactive under normal conditions

Chemical stability:

Stable under normal conditions

Possible hazardous reactions:

None under normal conditions

Conditions to avoid:

Incompatible materials

Incompatible materials:

Acids, Bases, Oxidizing agents, Hydrogen fluoride, Acetylene and ammonia

Hazardous decomposition products:

25068-38-6: Strong oxidizing, acids, amines, and bases

SECTION 11: Toxicological information
--

Acute Toxicity:

Oral:

25068-38-6 LD50 Oral-rat-13,600 mg/kg

2461-15-6 LD50 Oral-rat-7,800 mg/kg

Inhalation:

N/A

Chronic Toxicity:

Inhalation:

May cause respiratory irritation

Skin corrosion/irritation:

1408-60-7

Serious eye damage/irritation:

14808-60-7

Respiratory or skin sensitization:

May cause skin sensitization in some individuals

Carcinogenicity:

N/A

Safety Data Sheet

According to 29CFR1910/1200 and GHS Rev.3

Effective date: 09.15.2015

MM High Strength Epoxy Part A

Reproductive Toxicity: No additional information

STOT-single and repeated exposure:

2461-15-6: Inhalation-May cause respiratory irritation

Additional toxicological information: No additional information

SECTION 12: Ecological information

Ecotoxicity:

2461-15-6: LC50-Carassius(goldfish)-14mg/l-24 h

13463-67-7: LC50-Other fish->1,000 mg/l-96 h

13463-67-7: EC50-Daphnia magna(Water flea)->1,000 mg/l-48 h

Persistence and degradability:

25068-38-6: Result: According to the results of test of biodegradability this product is not readily biodegradable. 1217-11-7: long term degradation products may arise.

Bioaccumulative potential: No additional information

Mobility in soil: no additional information

Other adverse effects: no additional information

SECTION 13: Disposal considerations

Waste disposal recommendations:

Contact a licensed professional waste disposal service to dispose of this material. Dispose of empty containers as usual product. Product or containers must not be disposed together with household garbage. It is the responsibility of the waste generator to properly characterize all waste materials according to applicable regulatory entities (US 40CFR262.11). Chemical waste generators must also consult local, regional, and national hazardous waste regulations. Ensure complete and accurate classification. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

SECTION 14: Transport information

US DOT

Not-Regulated

Safety Data Sheet

According to 29CFR1910/1200 and GHS Rev.3

Effective date: 09.15.2015

MM High Strength Epoxy Part A

UN Number: 3082
ADR,AND,DOT,IMDG,IATA

Limited Quantity : NONE

Bulk: Non Bulk

RQ (if applicable): none
Proper shipping name: Environmentally
Hazardous substance, liquid, n.o.s.
Hazardous substance, liquid, n.o.s.
(reaction product: bisphenol-A-
(epichlorhydrin) and epoxy resin(number
Average molecular weight <=700)

RQ (if applicable): none
Proper shipping name: Environmentally
Hazardous substance, liquid, n.o.s.
Hazardous substance, liquid, n.o.s.
(reaction product: bisphenol-A-
(epichlorhydrin) and epoxy resin(number
Average molecular weight <=700)

Hazard Class: 9

Hazard class: 9

Packing Group: III

Packing Group: III

Marine Pollutant(if applicable): no

Marine Pollutant (if applicable): no

SECTION 15: regulatory information

United States (USA)

SARA SECTION 311/312 (Specific toxic chemical listings):
Acute

SARA SECTION 311/312 (Specific toxic chemical listings):
None of the ingredients are listed.

RCRA (hazardous waste code):
None of the ingredients are listed.

TSCA (Toxic substance control act)
All ingredients are listed.

CERCLA (Comprehensive Environmental Response, Compensation, and Liability Act)
None of the ingredients are listed.

Proposition 65 (California):

Chemicals known to cause cancer:
None of the ingredients are listed.

Chemicals known to cause reproduction toxicity for females:
None of the ingredients are listed.

Chemicals known to cause reproduction toxicity for males:
None of the ingredients are listed.

Chemicals known to cause developmental toxicity:
None of the ingredients are listed.

Safety Data Sheet

According to 29CFR1910/1200 and GHS Rev.3

Effective date: 09.15.2015

MM High Strength Epoxy Part A

Canada

Canadian Domestic Substance list (DSL)

None of the ingredients are listed.

SECTION 16: Other information

This product has been classified in accordance with hazard criteria of the Controlled Products Regulations and the SDS contains all the information required by the Controlled Products Regulations. Note. The responsibility to provide a safe workplace remains with the user. The user should consider the health hazards and safety information contained herein as a guide and should take these precautions required in an individual operation to instruct employees and develop work practice procedures for a safe work environment. The information handling and use are beyond our control, we make no guarantee of results, and assume no liability for damages incurred by the use of the material. It is the responsibility of the user to comply with all applicable laws and regulations applicable to this material.

NFPA: 2-10

HMIS: 3-1-0

GHS Full Text Phrases: None

Abbreviations and Acronyms: None

Effective date: 09.15.2015

Last updated: 09.15.2015

Safety Data Sheet

According to 29CFR1910/1200 and GHS Rev.3

Effective date: 09.15.2015

MM High Strength Epoxy Part B

SECTION 1: Identification of the substance/mixture and of the supplier

Product name: MM High Strength Epoxy Part B

Manufacture/Supplier Trade Name:

Manufacture/Supplier Article Number:

Recommended uses of the product and restrictions on use: High Strength Epoxy

Manufacturer Details:

MM Systems Corporation

50 MM Way

Pendergrass, GA 30567

706-824-7500

Emergency telephone number:

Infotrac 800-535-5053

SECTION 2: Hazards Identification

Classification of the substance or mixture:



Irritant

Skin irritation, category 2

Eye irritation, category 2A

Skin sensitization, category 1

Specific target organ toxicity following single exposure, category 1

Acute toxicity(oral,dermal,inhalation), category 1



Health hazard:

Reproductive toxicity, category 2



Skin Corrosion/irritation-Skin irritation 2

Skin sensitizer 1

Eye irritation 2

STOT single exposure 3

Acute toxicity-Oral-Acute tox. 4

Reproductive toxicity-repr. 2

Signal word: Danger

Hazard statement:

Harmful if swallowed

Causes skin irritation

Causes serious eye irritation

Harmful if swallowed

Page 1 of 10

May cause an allergic skin irritation

Safety Data Sheet

According to 29CFR1910/1200 and GHS Rev.3

Effective date: 09.15.2015

MM High Strength Epoxy Part B

Precautionary statements:

Keep container tightly closed

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

Keep out reach of children

Read label before use

Avoid breathing dust/gas/mist/vapors/spray

Wash skin thoroughly after handling

Contaminated work clothing should not be allowed out of the workplace

Avoid release to the environment

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

IF ON SKIN: Wash with soap and water

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

Continue rinsing

IF INHALED: Remove victim to fresh air and keep at rest in a comfortable for breathing

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

Take off contaminated clothing and wash before reuse

Collect spillage

Store locked up

Store in a well ventilated place. Keep container tightly closed

Dispose of contents and container as instructed in Section 13

Other Non-GHS Classification: Health-3,Flammability-1,Physical-0,Personal Protection X

SECTION 3: Composition/information on ingredients

Ingredients

CAS 1408-60-7	Silicon dioxide	60-70%
CAS 68953-36-6	Polyamido Amine	25-30%
CAS 12174-11-7	Attapulgate clay	5-7+%

Percentages are by weight

Safety Data Sheet

According to 29CFR1910/1200 and GHS Rev.3

Effective date: 09.15.2015

MM High Strength Epoxy Part B

SECTION 4: First aid measures

Description of first aid measures

Page 2 of 10

After inhalation:

Move exposed to fresh air. Give artificial respiration if necessary. If breathing is difficult give oxygen. Loosen clothing and place exposed in a comfortable position.

After skin contact:

Wash hands and exposed skin with soap and plenty of water. Rinse/flush exposed skin gently using soap and water for 15-20 minutes. Seek medical advice if discomfort or irritation persists. Wash away any material which may have contacted the body with copious amounts of water or soap.

After eye contact:

Seek medical attention. Protect unexposed eye. Flush exposed eye gently using water for 15-20 minutes

Remove contact lenses while rinsing

After swallowing:

Rinse mouth with water. Do not induce vomiting. Never give anything by mouth to an unconscious person. Seek medical attention

Most important symptoms and effects, both acute and delayed:

Shortness of breath, Headache, Nausea, Dizziness, Irritation-all routes of exposure. Acute pneumoconiosis or silicosis from overwhelming exposure to crystalline silica dust has occurred. Lungs may be affected by repeated or prolonged exposure to fibers, resulting in fibrosis. This substance is possible carcinogenic to humans. Persons with impaired respiratory function may be more susceptible to the effects of this substance. Smoking can increase the risk of lung injury.

Indication of any immediate medical attention and special treatment needed

If seeking medical attention provide SDS document to physician. Physician should treat symptomatically.

Safety Data Sheet

According to 29CFR1910/1200 and GHS Rev.3

Effective date: 09.15.2015

MM High Strength Epoxy Part B

SECTION 5: Firefighting measures

Extinguishing media

Suitable extinguishing agents:

Use water, dry chemical, chemical foam, carbon dioxide, or alcohol-resistant foam. Use appropriate fire suppression agents for adjacent combustible materials or sources of ignition. If large quantities of combustibles are involved, use water in flooding quantities as spray and fog. Use water spray to Knock-down vapors. Page 3 of 10

Unsuitable extinguishing agents: None

Advice for firefighter:

Protective equipment: Wear protective eyewear, gloves, and clothing. Refer to section Additional information (precautions)

Avoid inhaling gases, fumes, dust, mist, and aerosols. Avoid contact with skin, eyes and clothing. Additional information (precautions)

If material not on fire and not involved in fire: keep sparks, flames, and other sources of ignition away. Keep material out of water sources and sewers. Build dikes to contain flow as necessary. Avoid inhaling gases, fumes, dust, mist, vapor, and aerosols. Avoid contact with skin, eyes and clothing. Move product containers away from fire or keep cool with water spray as a protective measure, where feasible. Avoid generating dust, fine dust dispersed in air in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard.

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures:

Water⁴ spill: Neutralize with agricultural lime (CaO), crushed limestone (CaCO₃) or sodium bicarbonate (NaHCO₃). If dissolved, in region of 10 ppm or greater concentration, apply activated carbon at ten times the spilled amount. Land spill: Dig a pit, pond, lagoon, holding area (should be sealed with an impermeable flexible membrane liner) to contain liquid or solid material. Dike surface flow using soil, sand bags, foamed polyurethane, or foamed concrete. Absorb bulk liquid with fly ash or cement powder. Neutralize as noted for water spill. Ensure adequate ventilation. Ensure that air-handling systems are operational

Environmental precautions:

Should not be released into environment. Prevent from reaching drains, sewer, or waterway. Collect contaminated soil for characterization per section 13.

Methods and material for containment and cleaning up:

Sweep up and shovel. Soak up with inert absorbent material and dispose of as hazardous waste. Wear protective eyewear, gloves, and clothing. Personal protection: P2 filter respirator for harmful particles. Dust deposits should not be allow to accumulate on surfaces, as these may form an explosive mixture if they are released into the atmosphere in sufficient concentration Avoid dispersal of dust in the air (i.e. clearing dust surface with compressed air). Collect solids in powder form using vacuum with (HEPA filter) Do not handle broken

Safety Data Sheet

According to 29CFR1910/1200 and GHS Rev.3

Effective date: 09.15.2015

MM High Strength Epoxy Part B

packages unless wearing appropriate chemical protective equipment. Wash away any material which may have contacted the body with copious amounts of water and soap. Refer to section 8. Always obey local regulations. If necessary use trained response staff or contractor. Evacuate personnel to safe areas. Containerize for disposal. Refer to section 13. Keep in suitable closed containers for disposal. Page 4 of 10

Sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard.

Reference to other sections: none

SECTION 7: HANDLING AND STORAGE

Precautions for safe handling;

Avoid contact with skin, eyes, and clothing. Follow good hygiene procedures when handling chemical materials. Do Not take working clothes home. Refer to Section 8. Follow proper disposal methods. Combustible dusts formation is a risk. Refer to Section 13. Do not eat, drink, smoke, or use personal products when handling chemical substance.

Conditions for safe storage, including any incompatibilities:

Store in a cool location. Keep away from food and beverages. Protect from freezing and physical damage. Provide ventilation for containers. Keep container tightly sealed, Store away from incompatible materials. Avoid storage near extreme heat, ignition sources or open flame.

SECTION 8: Exposure controls/personal protection

Control Parameters:

68953-36-6 AIHA WEEL (2004-01.01) TWA 5 mg/m³

Appropriate Engineering controls:

Emergency eye wash fountains and safety showers should be available in the immediate vicinity of use or handling. Provide exhaust ventilation or other engineering controls To keep the airborne concentrations of vapor and mist below the applicable workplace exposure limits indicated above. (Occupational Exposure-OELS). It is recommended that all dust control equipment such as local exhaust ventilation and material transport systems involved in handling of this product contain explosive relief vents or an explosive suppression system or an oxygen deficient environment. Ensure that dust-handling systems (such as exhaust ducts, dust collectors, vessels, and processing equipment) are designed in a manner to prevent the escape of dust into the work area (i.e. there is no leakage from the equipment) Use under a fume hood.

Respiratory protection:

Where risk Assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN143) respirator cartridges as a backup to engineering controls. When necessary use NIOSH approved breathing equipment.

Protection of skin:

Select glove material impermeable and resistant to the

Safety Data Sheet

According to 29CFR1910/1200 and GHS Rev.3

Effective date: 09.15.2015

MM High Strength Epoxy Part B

substance. Select glove material based on rates of diffusion and degradation. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Use proper glove removal technique without touching outer service. Avoid skin contact with used gloves. Wear protective clothing.

Eye protection:

Faceshield (8-inch minimum) with tightly fitting safety goggles are appropriate eyewear. Wear equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166 (EU)

General hygienic measures:

Perform routine housekeeping. Wash hands before breaks and immediately after handling the product. Avoid contact with skin, eyes, and clothing. Before rewearing wash contaminated clothing.

SECTION 9: Physical and chemical properties

Appearance (physical State, color)	black, gritty paste	Explosion limit lower	N/A
		Explosion limit upper	N/A
Odor:	Slight ammonia	Vapor pressure at 20⁰	Not determined
Odor threshold:	Not Determined	Vapor density	Not determined
PH-value:	Not Determined	Relative density	1.77
Melting/Freezing Point:	Not Determined	Solubilities	N/A
Boiling point/Range:	Not Determined	Partition coefficient (n-octanol/water)	Not determined
Flash point(closed cup):	Not Determined	Auto/self-ignition Temperature	Not determined
Evaporation rate:	Not Determined	Decomposition Temp	Not determined
Flammability (solid Gaseous)	Not Determined	Viscosity	a. Kinematic Paste b. Dynamic: Paste
Density at 20⁰	Not Determined		1.77

SECTION 10: Stability and reactivity

Reactivity:

Nonreactive under normal conditions

Chemical stability:

Stable under normal conditions. Chemically inert, properties are inert; affected by change in PH

Safety Data Sheet

According to 29CFR1910/1200 and GHS Rev.3

Effective date: 09.15.2015

MM High Strength Epoxy Part B

Possible hazardous reactions:

None under normal conditions

Conditions to avoid:

Incompatible materials

Incompatible materials:

Strong Acids, Strong Bases, Oxidizing agents, Hydrogen fluoride.

Hazardous decomposition products:

Carbon oxides, Nitrogen oxides, Ammonia. When heated to decomposition it emits acrid smoke and irritating fumes.

SECTION 11: Toxicological information

Acute Toxicity:

Oral:

Inhalation:

The substance can be absorbed into the body by inhalation.

Chronic Toxicity:

Inhalation:

May cause respiratory irritation

Corrosion irritation

Dermal: Section 2, Classified as skin irritant

Ocular: Section 2, Classified as eye irritant

Sensitization: Classified as a skin sensitizer

Single Target organ (STOT): Classified as respiratory irritant

Numerical measure: No Additional information

Mutagenicity: No additional information

Reproductive Toxicity: Classified as possible causing reproductive harm to fertility or unborn child

SECTION 12: Ecological information

Ecotoxicity:

Fish (acute 84852-15-3): 96 hr LC50 Pimephales promelas: 0.135 MG/L {flow-through}; 96 hr LC50 lepomis macrochirus: 0.1351 mg/l {flow-through}

Crustacea (acute 84852-15-3): 48 hr EC50 Daphnia magna: 0.14 mg/l

Algae (acute 84852-15-3): 96 hr EC50 Pseudokirchneriella subcapitata: 0.36-0.48 mg/l {static}; 72 hr EC50 Pseudokirchneriella subcapitata: 0.16-0.72 mg/l {static}; 72 hr EC50 Desmodesmus subspicatus: 1.3 mg/l

Safety Data Sheet

According to 29CFR1910/1200 and GHS Rev.3

Effective date: 09.15.2015

MM High Strength Epoxy Part B

SECTION 15: regulatory information

United States (USA)

SARA SECTION 311/312 (Specific toxic chemical listings):

None of the ingredients is listed

SARA SECTION 313 (Specific toxic chemical listings):

84852-15-3.1.0% de minimis concentration (listed under Chemical Category Nonylphenol)

RCRA (hazardous waste code):

None of the ingredients are listed.

TSCA (Toxic substance control act)

All ingredients are listed.

CERCLA (Comprehensive Environmental Response, Compensation, and Liability Act)

None of the ingredients are listed.

Proposition 65 (California):

Chemicals known to cause cancer:

None of the ingredients are listed.

Chemicals known to cause reproduction toxicity for females:

None of the ingredients are listed.

Chemicals known to cause reproduction toxicity for males:

None of the ingredients are listed.

Chemicals known to cause developmental toxicity:

None of the ingredients are listed.

Canada

Canadian Domestic Substance list (DSL)

None of the ingredients are listed.

Canadian NPRI ingredient disclosure list (limit 0.1%)

None of the ingredients is listed

Canadian NPRI ingredient disclosure list (limit 1%)

148-8-60-7 Quartz

SECTION 16: Other information

This product has been classified in accordance with hazard criteria of the Controlled Products Regulations and the SDS contains all the information required by the Controlled Products Regulations. Note. The responsibility to provide a safe workplace remains with the user. The user should consider the health hazards and safety information contained herein as a guide and should take these precautions required in an individual operation to instruct employees and develop work practice procedures for a safe work environment. The information handling and use are beyond our control, we make no guarantee of results, and assume no liability for

Safety Data Sheet

According to 29CFR1910/1200 and GHS Rev.3

Effective date: 09.15.2015

MM High Strength Epoxy Part B

damages incurred by the use of the material. It is the responsibility of the user to comply with all applicable laws and regulations applicable to this material. The information contained herein is, to the best of our knowledge and belief, accurate.

GHS Full Text Phrases: None

Abbreviations and Acronyms:

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonized System of classification and labelling of chemicals

ACGIH; American Conference of Governmental Industrial Hygienists

CAS: Chemical Abstracts Service (division of the American Chemical Society)

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification Systems (USA)

ACGIH: American Conference of Governmental Industrial Hygienists

WHMIS: Workplace Hazardous Materials Information System (CANADA)

DNEL: Derived No-Effect level (Reach)

PNEC: Predicted No-Effect Concentration (Reach)

CFR: Code of Federal Regulations (USA)

SARA: Superfund Amendments and Reauthorization Act (USA)

RCRA: Resource Conservation and Recovery Act (USA)

TSCA: Toxic Substance Control Act (USA)

NPRI: National Pollutant Release Inventory (CANADA)

DOT: US Department of Transportation

CAS: Chemical Abstracts Service (Division of the American Chemical Society)

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

WHMIS: Workplace Hazardous Materials Information System (CANADA)

DNEL: Derived No-Effect Level (Reach)

Safety Data Sheet

acc. to OSHA HCS

Printing date 01/22/2016

Reviewed on 01/22/2016

1 Identification

- **Product identifier**
- **Trade name:** Pro-Poxy™ 300 Fast - Part A
- **Article number:** 87-140177A
- **Application of the substance / the mixture**
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
Unitex®
3101 Gardner
Kansas city, MO 64120

Tel: (800) 821-5846
Fax: (816) 483-3149

Emergency Telephone Number: Use only in the event of an emergency involving a spill, leak, fire, exposure, or accident involving chemicals. Within the U.S., Canada, or the U.S. Virgin Islands, call ChemTrec at (800) 424-9300, 24 hours a day. Or, outside these areas, call (703) 527-3887. Collect calls are accepted.

- **Information department:** Environmental, Health, and Safety department.

2 Hazard(s) identification

- **Classification of the substance or mixture**
Eye Irrit. 2A H319 Causes serious eye irritation.
Carc. 2 H351 Suspected of causing cancer.
- **Label elements**
- **GHS label elements** The product is classified and labeled according to the Globally Harmonized System (GHS).
- **Hazard pictograms**



GHS07 GHS08

- **Signal word** Warning
- **Hazard-determining components of labeling:**
Talc ($Mg_3H_2(SiO_3)_4$)
- **Hazard statements**
Causes serious eye irritation.
Suspected of causing cancer.
- **Precautionary statements**
Wear eye protection / face protection.
If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
IF exposed or concerned: Get medical advice/attention.
If eye irritation persists: Get medical advice/attention.
Store locked up.
Dispose of contents/container in accordance with local/regional/national/international regulations.
- **Classification system:**
- **NFPA ratings (scale 0 - 4)**



Health = 1
Fire = 1
Reactivity = 0

(Contd. on page 2)

Safety Data Sheet

acc. to OSHA HCS

Printing date 01/22/2016

Reviewed on 01/22/2016

Trade name: Pro-Poxy™ 300 Fast - Part A

(Contd. of page 1)

· HMIS-ratings (scale 0 - 4)

HEALTH	1	Health = 1
FIRE	1	Fire = 1
PHYSICAL HAZARD	0	Reactivity = 0

· Other hazards

· Results of PBT and vPvB assessment

· **PBT:** Not applicable.

· **vPvB:** Not applicable.

3 Composition/information on ingredients

· Chemical characterization: Mixtures

· **Description:** Mixture of the substances listed below with nonhazardous additions.

· Dangerous components:

14807-96-6	Talc (Mg ₃ H ₂ (SiO ₃) ₄)	≤ 10%
------------	---	-------

· **Additional information:** For the wording of the listed risk phrases refer to section 16.

4 First-aid measures

· Description of first aid measures

· General information:

Immediately remove any clothing soiled by the product.

In the event of persistent symptoms receive medical treatment.

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

· After inhalation:

Immediately move exposed person to fresh air. If breathing difficulty persists or develops get prompt medical attention.

· After skin contact:

Immediately wash with water and soap and rinse thoroughly.

If skin irritation continues, consult a doctor.

· **After eye contact:** Rinse opened eye for several minutes under running water. Then consult a doctor.

· After swallowing:

Seek immediate medical advice.

Seek medical treatment.

· Information for doctor:

· **Most important symptoms and effects, both acute and delayed** No further relevant information available.

· **Indication of any immediate medical attention and special treatment needed** No further relevant information available.

5 Fire-fighting measures

· Extinguishing media

· Suitable extinguishing agents:

CO₂, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

· **Special hazards arising from the substance or mixture** No further relevant information available.

(Contd. on page 3)

Safety Data Sheet

acc. to OSHA HCS

Printing date 01/22/2016

Reviewed on 01/22/2016

Trade name: Pro-Poxy™ 300 Fast - Part A

(Contd. of page 2)

- **Advice for firefighters**

- **Protective equipment:**

Because fire may produce thermal decomposition products, wear a self-contained breathing apparatus (SCBA) with a full face piece operated in pressure-demand or positive-pressure mode.

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**

Wear protective equipment. Keep unprotected persons away.

- **Environmental precautions:** *Do not allow product to reach sewage system or any water course.*

- **Methods and material for containment and cleaning up:**

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Dispose contaminated material as waste according to item 13.

Ensure adequate ventilation.

- **Reference to other sections**

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

7 Handling and storage

- **Handling:**

- **Precautions for safe handling**

Wear appropriate personal protective clothing to prevent eye and skin contact. Avoid breathing vapors or mists of this product. Use with adequate ventilation. Do not take internally.

- **Information about protection against explosions and fires:** *No special measures required.*

- **Conditions for safe storage, including any incompatibilities**

- **Storage:** *cool and dry*

- **Requirements to be met by storerooms and receptacles:** *Store in a cool dry location.*

- **Information about storage in one common storage facility:** *Store away from incompatible materials.*

- **Further information about storage conditions:** *Keep receptacle tightly sealed.*

- **Specific end use(s)** *No further relevant information available.*

8 Exposure controls/personal protection

- **Additional information about design of technical systems:** *No further data; see item 7.*

- **Control parameters**

- **Components with limit values that require monitoring at the workplace:**

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

- **Additional information:** *The lists that were valid during the creation were used as basis.*

- **Exposure controls**

- **Personal protective equipment:**

- **General protective and hygienic measures:**

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing.

Wash hands before breaks and at the end of work.

Avoid contact with the eyes.

Avoid contact with the eyes and skin.

(Contd. on page 4)

Safety Data Sheet

acc. to OSHA HCS

Printing date 01/22/2016

Reviewed on 01/22/2016

Trade name: Pro-Poxy™ 300 Fast - Part A

(Contd. of page 3)

· **Breathing equipment:**

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.

· **Protection of hands:**



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

· **Eye protection:** Wear appropriate eye protection to prevent eye contact.

9 Physical and chemical properties

· **Information on basic physical and chemical properties**

· **General Information**

· **Appearance:**

Form: Liquid

Color: Clear

· **Odor:** Mild

· **Odor threshold:** Not determined.

· **pH-value:** Not determined.

· **Change in condition**

Melting point/Melting range: Undetermined.

Boiling point/Boiling range: Undetermined.

· **Flash point:** > 93 °C (> 199 °F)

· **Flammability (solid, gaseous):** Not applicable.

· **Ignition temperature:**

Decomposition temperature: Not determined.

· **Auto igniting:** Product is not selfigniting.

· **Danger of explosion:** Product does not present an explosion hazard.

· **Explosion limits:**

Lower: Not determined.

Upper: Not determined.

· **Vapor pressure:** Not determined.

· **Density at 20 °C (68 °F):** 1.2 g/cm³ (10.014 lbs/gal)

· **Relative density** Not determined.

· **Vapor density** Not determined.

· **Evaporation rate** Not determined.

· **Solubility in / Miscibility with**

Water: Not miscible or difficult to mix.

· **Partition coefficient (n-octanol/water):** Not determined.

· **Viscosity:**

Dynamic at 20 °C (68 °F): 1000000 mPas

Kinematic: Not determined.

(Contd. on page 5)

Safety Data Sheet

acc. to OSHA HCS

Printing date 01/22/2016

Reviewed on 01/22/2016

Trade name: Pro-Poxy™ 300 Fast - Part A

(Contd. of page 4)

· Solvent content:	
Organic solvents:	0.0 %
· Solids content: 100.0 %	
· Other information No further relevant information available.	
· Volatile Organic Compounds: Not determined	

10 Stability and reactivity

- **Reactivity** No decomposition if stored and applied as directed.
- **Chemical stability** No decomposition if stored and applied as directed
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Possibility of hazardous reactions** Reacts with acids, alkalis and oxidizing agents.
- **Conditions to avoid** Keep away from heat and sources of ignition.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:** Carbon monoxide and carbon dioxide

11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity:**

- **LD/LC50 values that are relevant for classification:**

25085-99-8 Diglycidyl ether of bisphenol A homopolymer

Oral	LD50	5000 mg/kg (rat)
Dermal	LD50	20000 mg/kg (rabbit)

- **Primary irritant effect:**
- **on the skin:** May cause skin irritation.
- **on the eye:**
Strong irritant with the danger of severe eye injury.
Irritating effect.
- **Sensitization:** No sensitizing effects known.
- **Additional toxicological information:**
The product shows the following dangers according to internally approved calculation methods for preparations:
Harmful
Irritant

- **Carcinogenic categories**

- **IARC (International Agency for Research on Cancer)**

14807-96-6 Talc (Mg₃H₂(SiO₃)₄)

2B

- **NTP (National Toxicology Program)**

None of the ingredients is listed.

- **OSHA-Ca (Occupational Safety & Health Administration)**

None of the ingredients is listed.

US

(Contd. on page 6)

Safety Data Sheet

acc. to OSHA HCS

Printing date 01/22/2016

Reviewed on 01/22/2016

Trade name: Pro-Poxy™ 300 Fast - Part A

(Contd. of page 5)

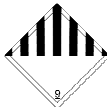

12 Ecological information

- **Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **Persistence and degradability** No further relevant information available.
- **Behavior in environmental systems:**
- **Bioaccumulative potential** No further relevant information available.
- **Mobility in soil** No further relevant information available.
- **Additional ecological information:**
- **General notes:** Water hazard class 1 (Self-assessment); slightly hazardous for water
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **Other adverse effects** No further relevant information available.

13 Disposal considerations

- **Waste treatment methods**
- **Recommendation:**
Must not be disposed of as normal garbage. Do not allow product to reach sewage system.
It is the generator's responsibility to determine if the waste meets applicable definitions of hazardous waste. State and local regulations may differ from federal disposal regulations. Dispose of waste material according to local, state, federal, and provincial environmental regulations.
- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to Federal, State, and Local regulations.

14 Transport information

- | | |
|---|--|
| <ul style="list-style-type: none"> · UN-Number · DOT, ADR, ADN, IATA · IMDG | <p style="text-align: center;">Not Regulated
UN3082</p> |
| <ul style="list-style-type: none"> · UN proper shipping name · DOT, ADR, ADN, IATA · IMDG | <p style="text-align: center;">Not Regulated
ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,
N.O.S. (epoxy resin), MARINE POLLUTANT</p> |
| <ul style="list-style-type: none"> · Transport hazard class(es) · DOT, ADR, ADN, IATA · Class | <p style="text-align: center;">Not Regulated</p> |
| <ul style="list-style-type: none"> · IMDG | |
| <div style="display: flex; align-items: center; gap: 10px;">   </div> | |
| <ul style="list-style-type: none"> · Class · Label | <p style="text-align: center;">9 Miscellaneous dangerous substances and articles
9</p> |
| <ul style="list-style-type: none"> · Packing group · DOT, ADR, IMDG, IATA | <p style="text-align: center;">III</p> |

(Contd. on page 7)

Safety Data Sheet

acc. to OSHA HCS

Printing date 01/22/2016

Reviewed on 01/22/2016

Trade name: Pro-Poxy™ 300 Fast - Part A

(Contd. of page 6)

· **Environmental hazards:**· **Marine pollutant:**

No

Symbol (fish and tree)

· **Special precautions for user**· **EMS Number:**

F-A,S-F

· **Stowage Category**

A

· **Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code**

Not applicable.

· **Transport/Additional information:**· **DOT**· **Remarks:**

Not Regulated for Transport.

· **ADR**· **Remarks:**

Not Regulated for Transport.

· **U.S. Domestic Ground Shipments:**

Same as listed for Standard Shipments above.

· **U.S. Domestic Ground Non-Bulk (119 gal or less per container) Shipments:**

Same as listed for Standard Shipments above.

· **Emergency Response Guide (ERG) Number:**

Not determine

· **UN "Model Regulation":**

Not Regulated

15 Regulatory information

· **Safety, health and environmental regulations/legislation specific for the substance or mixture**· **Sara**· **Section 355 (extremely hazardous substances):**

None of the ingredient is listed.

· **Section 313 (Specific toxic chemical listings):**

This product may contain 1 or more toxic chemicals subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act (SARA) of 1986 and 40 CFR part 372. If so, the chemicals are listed below.

None of the ingredients is listed.

· **TSCA (Toxic Substances Control Act):**

All ingredients are listed.

· **Proposition 65**· **Chemicals known to the State of California (Prop. 65) to cause cancer:**

None of the ingredients is listed.

· **Chemicals known to cause reproductive toxicity for females:**

None of the ingredients is listed.

· **Chemicals known to cause reproductive toxicity for males:**

None of the ingredients is listed.

· **Chemicals known to cause developmental toxicity:**

None of the ingredients is listed.

· **Cancerogenity categories**· **EPA (Environmental Protection Agency)**

None of the ingredients is listed.

(Contd. on page 8)

Safety Data Sheet

acc. to OSHA HCS

Printing date 01/22/2016

Reviewed on 01/22/2016

Trade name: Pro-Poxy™ 300 Fast - Part A

(Contd. of page 7)

· **TLV (Threshold Limit Value established by ACGIH)**

14807-96-6 Talc (Mg₃H₂(SiO₃)₄)

A4

· **MAK (German Maximum Workplace Concentration)**

14807-96-6 Talc (Mg₃H₂(SiO₃)₄)

3B

· **NIOSH-Ca (National Institute for Occupational Safety and Health)**

None of the ingredients is listed.

· **GHS label elements** The product is classified and labeled according to the Globally Harmonized System (GHS).

· **Hazard pictograms**



GHS07 GHS08

· **Signal word** Warning

· **Hazard-determining components of labeling:**

Talc (Mg₃H₂(SiO₃)₄)

· **Hazard statements**

Causes serious eye irritation.

Suspected of causing cancer.

· **Precautionary statements**

Wear eye protection / face protection.

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

IF exposed or concerned: Get medical advice/attention.

If eye irritation persists: Get medical advice/attention.

Store locked up.

Dispose of contents/container in accordance with local/regional/national/international regulations.

· **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· **Department issuing SDS:** Environmental, Health & Safety Department

· **Contact:** Environmental, Health & Safety Manager

· **Date of preparation / last revision** 01/22/2016 / 173

· **Abbreviations and acronyms:**

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

ACGIH: American Conference of Governmental Industrial Hygienists

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

NIOSH: National Institute for Occupational Safety

OSHA: Occupational Safety & Health

TLV: Threshold Limit Value

(Contd. on page 9)

Safety Data Sheet
acc. to OSHA HCS

Printing date 01/22/2016

Reviewed on 01/22/2016

Trade name: Pro-Poxy™ 300 Fast - Part A

(Contd. of page 8)

PEL: Permissible Exposure Limit

REL: Recommended Exposure Limit

Eye Irrit. 2A: Serious eye damage/eye irritation, Hazard Category 2A

Carc. 2: Carcinogenicity, Hazard Category 2

US

Safety Data Sheet

acc. to OSHA HCS

Printing date 03/14/2016

Reviewed on 03/14/2016

1 Identification

- **Product identifier**

- **Trade name:** Pro-Poxy™ 300 Fast - Part B

- **Article number:** 87-140177B

- **Application of the substance / the mixture**

- **Details of the supplier of the safety data sheet**

- **Manufacturer/Supplier:**

Unitex®

3101 Gardner

Kansas city, MO 64120

Tel: (800) 821-5846

Fax: (816) 483-3149

Emergency Telephone Number: Use only in the event of an emergency involving a spill, leak, fire, exposure, or accident involving chemicals. Within the U.S., Canada, or the U.S. Virgin Islands, call ChemTrec at (800) 424-9300, 24 hours a day. Or, outside these areas, call (703) 527-3887. Collect calls are accepted.

- **Information department:** Environmental, Health, and Safety department.

2 Hazard(s) identification

- **Classification of the substance or mixture**

Acute Tox. 4 H332 Harmful if inhaled.

Skin Corr. 1C H314 Causes severe skin burns and eye damage.

Eye Dam. 1 H318 Causes serious eye damage.

Skin Sens. 1 H317 May cause an allergic skin reaction.

Repr. 2 H361 Suspected of damaging fertility or the unborn child.

- **Label elements**

- **GHS label elements** The product is classified and labeled according to the Globally Harmonized System (GHS).

- **Hazard pictograms**



GHS05

GHS07

GHS08

- **Signal word** Danger

- **Hazard-determining components of labeling:**

m-phenylenebis(methylamine)

nonylphenol

cyclohex-1,2-ylenediamine

hexamethylenediamine

- **Hazard statements**

Harmful if inhaled.

Causes severe skin burns and eye damage.

May cause an allergic skin reaction.

Suspected of damaging fertility or the unborn child.

- **Precautionary statements**

Do not breathe dusts or mists.

If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Immediately call a POISON CENTER/doctor.

Store locked up.

Dispose of contents/container in accordance with local/regional/national/international regulations.

(Contd. on page 2)

Safety Data Sheet

acc. to OSHA HCS

Printing date 03/14/2016

Reviewed on 03/14/2016

Trade name: Pro-Poxy™ 300 Fast - Part B

(Contd. of page 1)

- **Classification system:**
- **NFPA ratings (scale 0 - 4)**



- **HMIS-ratings (scale 0 - 4)**

HEALTH	3	Health = 3
FIRE	1	Fire = 1
PHYSICAL HAZARD	2	Reactivity = 2

- **Other hazards**
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

3 Composition/information on ingredients

- **Chemical characterization: Mixtures**
- **Description:** Mixture of the substances listed below with nonhazardous additions.

- **Dangerous components:**

1477-55-0	m-phenylenebis(methylamine)	10-25%
25154-52-3	nonylphenol	10-25%
694-83-7	cyclohex-1,2-ylenediamine	≤ 10%
124-09-4	hexamethylenediamine	≤ 5%
110-60-1	tetramethylenediamine	≤ 1%
156-87-6	3-aminopropan-1-ol	≤ 1%

- **Additional information:** For the wording of the listed hazard phrases refer to section 16.

4 First-aid measures

- **Description of first aid measures**
- **General information:**
Immediately remove any clothing soiled by the product.
In the event of persistent symptoms receive medical treatment.
Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.
- **After inhalation:**
Supply fresh air and to be sure call for a doctor.
In case of unconsciousness place patient stably in side position for transportation.
Immediately move exposed person to fresh air. If breathing difficulty persists or develops get prompt medical attention.
- **After skin contact:**
Immediately wash with water and soap and rinse thoroughly.
Immediately rinse with water.
If skin irritation continues, consult a doctor.
- **After eye contact:** Rinse opened eye for several minutes under running water. Then consult a doctor.
- **After swallowing:**
Immediately call a doctor.
Drink copious amounts of water and provide fresh air. Immediately call a doctor.

(Contd. on page 3)

Safety Data Sheet

acc. to OSHA HCS

Printing date 03/14/2016

Reviewed on 03/14/2016

Trade name: Pro-Poxy™ 300 Fast - Part B

(Contd. of page 2)

Seek medical treatment.

Information for doctor:

- **Most important symptoms and effects, both acute and delayed** No further relevant information available.
- **Indication of any immediate medical attention and special treatment needed** No further relevant information available.

5 Fire-fighting measures

· **Extinguishing media**

· **Suitable extinguishing agents:**

CO₂, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

· **Special hazards arising from the substance or mixture** No further relevant information available.

· **Advice for firefighters**

· **Protective equipment:**

Because fire may produce thermal decomposition products, wear a self-contained breathing apparatus (SCBA) with a full face piece operated in pressure-demand or positive-pressure mode.

6 Accidental release measures

· **Personal precautions, protective equipment and emergency procedures**

Wear protective equipment. Keep unprotected persons away.

· **Environmental precautions:**

Do not allow product to reach sewage system or any water course.

Inform respective authorities in case of seepage into water course or sewage system.

· **Methods and material for containment and cleaning up:**

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Use neutralizing agent.

Dispose contaminated material as waste according to item 13.

Ensure adequate ventilation.

· **Reference to other sections**

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

7 Handling and storage

· **Handling:**

· **Precautions for safe handling**

Wear appropriate personal protective clothing to prevent eye and skin contact. Avoid breathing vapors or mists of this product. Use with adequate ventilation. Do not take internally.

· **Information about protection against explosions and fires:** No special measures required.

· **Conditions for safe storage, including any incompatibilities**

· **Storage:**

· **Requirements to be met by storerooms and receptacles:** Store in a cool dry location.

· **Information about storage in one common storage facility:** Store away from incompatible materials.

· **Further information about storage conditions:** Keep receptacle tightly sealed.

· **Specific end use(s)** No further relevant information available.

8 Exposure controls/personal protection

- **Additional information about design of technical systems:** No further data; see item 7.

(Contd. on page 4)

Safety Data Sheet

acc. to OSHA HCS

Printing date 03/14/2016

Reviewed on 03/14/2016

Trade name: Pro-Poxy™ 300 Fast - Part B

(Contd. of page 3)

- **Control parameters**

- **Components with limit values that require monitoring at the workplace:**

The following constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit.

At this time, the other constituents have no known exposure limits.

1477-55-0 m-phenylenebis(methylamine)

REL	Ceiling limit value: 0.1 mg/m ³ Skin
-----	--

TLV	Ceiling limit value: 0.1 mg/m ³ Skin
-----	--

124-09-4 hexamethylenediamine

TLV	Long-term value: 2.3 mg/m ³ , 0.5 ppm
-----	--

WEEL	Long-term value: 1 ppm
------	------------------------

- **Additional information:** The lists that were valid during the creation were used as basis.

- **Exposure controls**

- **Personal protective equipment:**

- **General protective and hygienic measures:**

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing.

Wash hands before breaks and at the end of work.

Do not inhale gases / fumes / aerosols.

Avoid contact with the eyes and skin.

- **Breathing equipment:**

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.

- **Protection of hands:**



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

- **Eye protection:** Wear appropriate eye protection to prevent eye contact.

9 Physical and chemical properties

- **Information on basic physical and chemical properties**

- **General Information**

- **Appearance:**

Form: Liquid

Color: Grey

- **Odor:** Distinctive

- **Odor threshold:** Not determined.

- **pH-value:** Not determined.

- **Change in condition**

Melting point/Melting range: Undetermined.

Boiling point/Boiling range: Undetermined.

- **Flash point:** >94 °C (>201 °F)

(Contd. on page 5)

Safety Data Sheet

acc. to OSHA HCS

Printing date 03/14/2016

Reviewed on 03/14/2016

Trade name: Pro-Poxy™ 300 Fast - Part B

(Contd. of page 4)

· Flammability (solid, gaseous):	Not applicable.
· Ignition temperature:	370 °C (698 °F)
· Decomposition temperature:	Not determined.
· Auto igniting:	Product is not selfigniting.
· Danger of explosion:	Product does not present an explosion hazard.
· Explosion limits:	
Lower:	1.0 Vol %
Upper:	0.0 Vol %
· Vapor pressure:	Not determined.
· Density at 20 °C (68 °F):	1.776 g/cm ³ (14.821 lbs/gal)
· Relative density	Not determined.
· Vapor density	Not determined.
· Evaporation rate	Not determined.
· Solubility in / Miscibility with Water:	Not miscible or difficult to mix.
· Partition coefficient (n-octanol/water):	Not determined.
· Viscosity:	
Dynamic:	Not determined.
Kinematic:	Not determined.
· Solvent content:	
Organic solvents:	0.0 %
Solids content:	100.0 %
· Other information	No further relevant information available.
· Volatile Organic Compounds:	Not determined

10 Stability and reactivity

- **Reactivity** No decomposition if stored and applied as directed.
- **Chemical stability** No decomposition if stored and applied as directed
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Possibility of hazardous reactions** Reacts with acids, alkalis and oxidizing agents.
- **Conditions to avoid** Keep away from heat and sources of ignition.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:**
Carbon monoxide and carbon dioxide
Nitrogen oxides

US
(Contd. on page 6)

Safety Data Sheet

acc. to OSHA HCS

Printing date 03/14/2016

Reviewed on 03/14/2016

Trade name: Pro-Poxy™ 300 Fast - Part B

(Contd. of page 5)

11 Toxicological information

- **Information on toxicological effects**

- **Acute toxicity:**

- **LD/LC50 values that are relevant for classification:**

1477-55-0 m-phenylenebis(methylamine)

Oral	LD50	1040 mg/kg (rat)
Inhalative	LC50/4 h	2.4 mg/l (rat)

25154-52-3 nonylphenol

Oral	LD50	1620 mg/kg (rat)
------	------	------------------

124-09-4 hexamethylenediamine

Oral	LD50	750 mg/kg (rat)
Dermal	LD50	1110 mg/kg (rabbit)

- **Primary irritant effect:**

- **on the skin:** May cause skin irritation.

- **on the eye:** Strong caustic effect.

- **Sensitization:** Sensitization possible through skin contact.

- **Additional toxicological information:**

The product shows the following dangers according to internally approved calculation methods for preparations:

Harmful

Corrosive

Irritant

Swallowing will lead to a strong caustic effect on mouth and throat and to the danger of perforation of esophagus and stomach.

- **Carcinogenic categories**

- **IARC (International Agency for Research on Cancer)**

None of the ingredients is listed.

- **NTP (National Toxicology Program)**

None of the ingredients is listed.

- **OSHA-Ca (Occupational Safety & Health Administration)**

None of the ingredients is listed.

12 Ecological information

- **Toxicity**

- **Aquatic toxicity:** No further relevant information available.

- **Persistence and degradability** No further relevant information available.

- **Behavior in environmental systems:**

- **Bioaccumulative potential** No further relevant information available.

- **Mobility in soil** No further relevant information available.

- **Ecotoxicological effects:**

- **Remark:** Toxic for fish

- **Additional ecological information:**

- **General notes:**

Water hazard class 1 (Self-assessment): slightly hazardous for water

Must not reach bodies of water or drainage ditch undiluted or unneutralized.

Also poisonous for fish and plankton in water bodies.

Toxic for aquatic organisms

(Contd. on page 7)

Safety Data Sheet

acc. to OSHA HCS

Printing date 03/14/2016

Reviewed on 03/14/2016

Trade name: Pro-Poxy™ 300 Fast - Part B





(Contd. of page 6)

- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **Other adverse effects** No further relevant information available.

13 Disposal considerations

- **Waste treatment methods**
- **Recommendation:**
Must not be disposed of as normal garbage. Do not allow product to reach sewage system.
It is the generator's responsibility to determine if the waste meets applicable definitions of hazardous waste. State and local regulations may differ from federal disposal regulations. Dispose of waste material according to local, state, federal, and provincial environmental regulations.
- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to Federal, State, and Local regulations.

14 Transport information

- | | |
|---|---|
| <ul style="list-style-type: none"> · UN-Number · DOT, ADR, IMDG, IATA | UN1760 |
| <ul style="list-style-type: none"> · UN proper shipping name · DOT, IATA · ADR · IMDG | Corrosive liquids, n.o.s. (nonylphenol)
1760 Corrosive liquids, n.o.s. (nonylphenol)
CORROSIVE LIQUID, N.O.S. (nonylphenol), MARINE POLLUTANT |
| <ul style="list-style-type: none"> · Transport hazard class(es) · DOT | |
|  | |
| <ul style="list-style-type: none"> · Class · Label | 8 Corrosive substances
8 |
| <ul style="list-style-type: none"> · ADR, IMDG | |
|   | |
| <ul style="list-style-type: none"> · Class · Label | 8 Corrosive substances
8 |
| <ul style="list-style-type: none"> · IATA | |
|  | |
| <ul style="list-style-type: none"> · Class | 8 Corrosive substances |

(Contd. on page 8)

US

Safety Data Sheet

acc. to OSHA HCS

Printing date 03/14/2016

Reviewed on 03/14/2016

Trade name: Pro-Poxy™ 300 Fast - Part B

(Contd. of page 7)

· Label	8
· Packing group · DOT, ADR, IMDG, IATA	III
· Environmental hazards: · Marine pollutant:	Product contains environmentally hazardous substances: nonylphenol Yes Symbol (fish and tree)
· Special marking (ADR):	Symbol (fish and tree)
· Special precautions for user · Danger code (Kemler): · EMS Number: · Stowage Category · Stowage Code	Warning: Corrosive substances 80 F-A,S-B A SW2 Clear of living quarters.
· Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not applicable.
· Transport/Additional information: · DOT · Remarks:	Add "Marine Pollutant" to end of proper shipping name if shipping in a bulk container (>119 gallons).
· ADR · Excepted quantities (EQ)	Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml
· U.S. Domestic Ground Shipments: · U.S. Domestic Ground Non-Bulk (119 gal or less per container) Shipments:	Same as listed for Standard Shipments above.
· Emergency Response Guide (ERG) Number:	Not determine
· IMDG · Limited quantities (LQ) · Excepted quantities (EQ)	5L Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml
· UN "Model Regulation":	UN 1760 CORROSIVE LIQUIDS, N.O.S., 8, III

15 Regulatory information

- Safety, health and environmental regulations/legislation specific for the substance or mixture
- Sara

· Section 355 (extremely hazardous substances):

None of the ingredient is listed.

· Section 313 (Specific toxic chemical listings):

This product may contain 1 or more toxic chemicals subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act (SARA) of 1986 and 40 CFR part 372. If so, the chemicals are listed below.

25154-52-3 nonylphenol

10-25%

· TSCA (Toxic Substances Control Act):

All ingredients are listed.

(Contd. on page 9)

Safety Data Sheet

acc. to OSHA HCS

Printing date 03/14/2016

Reviewed on 03/14/2016

Trade name: Pro-Poxy™ 300 Fast - Part B

(Contd. of page 8)

· **Proposition 65**

· **Chemicals known to the State of California (Prop. 65) to cause cancer:**

None of the ingredients is listed.

· **Chemicals known to cause reproductive toxicity for females:**

None of the ingredients is listed.

· **Chemicals known to cause reproductive toxicity for males:**

None of the ingredients is listed.

· **Chemicals known to cause developmental toxicity:**

None of the ingredients is listed.

· **Carcinogenicity categories**

· **EPA (Environmental Protection Agency)**

None of the ingredients is listed.

· **TLV (Threshold Limit Value established by ACGIH)**

None of the ingredients is listed.

· **MAK (German Maximum Workplace Concentration)**

None of the ingredients is listed.

· **NIOSH-Ca (National Institute for Occupational Safety and Health)**

None of the ingredients is listed.

· **GHS label elements** The product is classified and labeled according to the Globally Harmonized System (GHS).

· **Hazard pictograms**



GHS05 GHS07 GHS08

· **Signal word** Danger

· **Hazard-determining components of labeling:**

m-phenylenebis(methylamine)

nonylphenol

cyclohex-1,2-ylenediamine

hexamethylenediamine

· **Hazard statements**

Harmful if inhaled.

Causes severe skin burns and eye damage.

May cause an allergic skin reaction.

Suspected of damaging fertility or the unborn child.

· **Precautionary statements**

Do not breathe dusts or mists.

If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Immediately call a POISON CENTER/doctor.

Store locked up.

Dispose of contents/container in accordance with local/regional/national/international regulations.

· **National regulations:**

· **Water hazard class:** Water hazard class 1 (Self-assessment): slightly hazardous for water.

(Contd. on page 10)

Safety Data Sheet

acc. to OSHA HCS

Printing date 03/14/2016

Reviewed on 03/14/2016

Trade name: Pro-Poxy™ 300 Fast - Part B

(Contd. of page 9)

· **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· **Department issuing SDS:** Environmental, Health & Safety Department

· **Contact:** Environmental, Health & Safety Manager

· **Date of preparation / last revision** 03/14/2016 / 239

· **Abbreviations and acronyms:**

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

ACGIH: American Conference of Governmental Industrial Hygienists

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

NIOSH: National Institute for Occupational Safety

OSHA: Occupational Safety & Health

TLV: Threshold Limit Value

PEL: Permissible Exposure Limit

REL: Recommended Exposure Limit

Acute Tox. 4: Acute toxicity, Hazard Category 4

Skin Corr. 1C: Skin corrosion/irritation, Hazard Category 1C

Eye Dam. 1: Serious eye damage/eye irritation, Hazard Category 1

Skin Sens. 1: Sensitisation - Skin, Hazard Category 1

Repr. 2: Reproductive toxicity, Hazard Category 2