TREMprime Multi-Surface Urethane Primer

Table of Contents

TREMprime Muli-Surface Primer Data Sheet - EN

TREMprime Multi-Surface Urethane Primer Kit - EN

1

2



TREMprime Multi-Surface Urethane Primer

Urethane Tie-In Primer

Product Description

TREMprime Multi-Surface Urethane Primer is a two-component, quick-drying, epoxy-based, VOC-compliant primer primarily for use with Vulkem® urethane deck coating and liquid-applied waterproofing products. It may also be used with Vulkem and Tremco branded urethane sealants.

Basic Uses

Porous surfaces, interlaminary, urethane coatings. Low-VOC (<60 g/L), two-part epoxy primer used to condition and prep porous surfaces and existing coatings for application of a new coating layer. Apply with a short nap roller or brush evenly to the surface. Primer must dry completely before coating application as indicated by turning from milky-white to completely clear.

Features & Benefits

- Improves wear and chemical resistance
- Reduces water and salt absorption
- · Water-based, low odor
- Resistant to mild acids
- Can be used as a primer under epoxy or urethane coatings
- · Resistant to gasoline and other solvent spills

Coverage Rate

Approximately 200 - 300 ft²/gal

Packaging

3-gal (11.4- L) kits:

Part A: 2 gal (7.6 L) can

Part B: 1 gal (3.8 L) can

Availability

Immediately available from your local Tremco Sales Representative, Tremco Distributor or Tremco Warehouse.

Storage

Store indoors, protected from moisture, at temperatures between 45°F and 110°F (7°C and 43°C) and out of direct sunlight.

Limitations

- · Protect from freezing.
- All surfaces must be sound, clean, dry and free from contamination. A
 thorough wire brushing, grinding, sandblasting or solvent cleaning may be
 required to expose clean, sound, virgin surfaces.
- Any questions regarding drying times, coverage rates and unique application techniques regarding the individual primers should be directed to Tremco Technical Services or your local Tremco Sales Representative.
- Do not apply over contaminated or damp surfaces.
- Do not thin.

Warranty

Tremco warrants its Products to be free of defects in materials, but makes no warranty as to appearance or color. Since methods of application and on-site conditions are beyond our control and can affect performance, Tremco makes no other warranty, expressed or implied, including warranties of MERCHANTABILITY and FITNESS FOR A PARTICULAR PURPOSE, with respect to Tremco Products. Tremco's sole obligation shall be, at its option, to replace or to refund the purchase price of the quantity of Tremco Product proven to be defective, and Tremco shall not be liable for any loss or damage.

Please refer to our website at www.tremcosealants.com for the most up-to-date Product Data Sheets.

NOTE: All Tremco Safety Data Sheets (SDS) are in alignment with the Globally Harmonized System of Classification and Labelling of Chemicals (GHS) requirements.

TYPICAL PHYSICAL PROPERTIES			
PROPERTY @ 75°F, 50% RH	TYPICAL VALUE		
Mix Ratio (A:B by Volume)	2:1		
Total Solids	20%		
VOC Content	68 g/L		
Pot Life	4 hrs		
Storage Temperature Range	45 °F (7 °C) minimum to 110 °F (43 °C) maximum		

0117/MSUPDS-DC





Revision Date: 07/28/2015

This is a kit that contains the following components: TREMPrime Multi Surface Urethane Primer- Part A

TREMprime Multi Surface Urethane Primer-Part B



Revision Date: 07/28/2015

SAFETY DATA SHEET

1. Identification

Product identifier: TREMPrime Multi Surface Urethane Primer- Part A

Product Code: 252102 504

Recommended use and restriction on use

Recommended use: Sealant Restrictions on use: Not known.

Manufacturer/Importer/Supplier/Distributor Information

Tremco U.S Sealants 3735 Green Road Cleveland OH 44122 US

Contact person: EH&S Department **Telephone:** 216-292-5000

Emergency telephone number: 1-800-424-9300 (US); 1-613-996-6666 (Canada)

2. Hazard(s) identification

Hazard Classification

Health Hazards

Skin sensitizer Category 1

Unknown toxicity - Health

Acute toxicity, oral 79.62 %
Acute toxicity, dermal 79.62 %
Acute toxicity, inhalation, vapor 100 %
Acute toxicity, inhalation, dust or mist 99.3 %

Unknown toxicity - Environment

Acute hazards to the aquatic 99.3 % environment

Chronic hazards to the aquatic 100 % environment

Label Elements

Hazard Symbol:



Signal Word: Warning

Hazard Statement: May cause an allergic skin reaction.



Revision Date: 07/28/2015

Precautionary Statement

Prevention: Avoid breathing dust/fume/gas/mist/vapors/spray. Contaminated work

clothing must not be allowed out of the workplace. Wear protective

gloves/protective clothing/eye protection/face protection.

Response: IF ON SKIN: Wash with plenty of water. If skin irritation or rash occurs: Get

medical advice/attention. Specific treatment (see this label). Wash

contaminated clothing before reuse.

Disposal: Dispose of contents/container to an appropriate treatment and disposal

facility in accordance with applicable laws and regulations, and product

characteristics at time of disposal.

Other hazards which do not result in GHS classification:

None.

3. Composition/information on ingredients

Mixtures

Chemical Identity	CAS number	Content in percent (%)*
Bisphenol A Polyglycidyl Ether Resin	25068-38-6	5 - 10%
1-Methoxy-2-Propanol	107-98-2	1 - 5%

^{*} All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

4. First-aid measures

Ingestion: Rinse mouth thoroughly.

Inhalation: Move to fresh air.

Skin Contact: Destroy or thoroughly clean contaminated shoes. Immediately remove

contaminated clothing and shoes and wash skin with soap and plenty of water. If skin irritation or an allergic skin reaction develops, get medical

attention.

Eye contact: Rinse immediately with plenty of water.

Most important symptoms/effects, acute and delayed

Symptoms: May cause skin and eye irritation.

Indication of immediate medical attention and special treatment needed

Treatment: Get medical attention if symptoms occur.

5. Fire-fighting measures

General Fire Hazards: No unusual fire or explosion hazards noted.



Revision Date: 07/28/2015

Suitable (and unsuitable) extinguishing media

Suitable extinguishing

media:

Use fire-extinguishing media appropriate for surrounding materials.

Unsuitable extinguishing

media:

Do not use water jet as an extinguisher, as this will spread the fire.

Specific hazards arising from

the chemical:

During fire, gases hazardous to health may be formed.

Special protective equipment and precautions for firefighters

Special fire fighting

procedures:

No data available.

Special protective equipment

for fire-fighters:

Self-contained breathing apparatus and full protective clothing must be

worn in case of fire.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures: See Section 8 of the SDS for Personal Protective Equipment. Do not touch

damaged containers or spilled material unless wearing appropriate

rgency procedures: protective clothing. Keep unauthorized personnel away.

Methods and material for containment and cleaning

up:

Dam and absorb spillages with sand, earth or other non-combustible material. Collect spillage in containers, seal securely and deliver for

disposal according to local regulations.

Notification Procedures: In the event of a spill or accidental release, notify relevant authorities in

accordance with all applicable regulations.

Environmental Precautions: Avoid release to the environment. Prevent further leakage or spillage if safe

to do so. Do not contaminate water sources or sewer. Environmental

manager must be informed of all major spillages.

7. Handling and storage

Precautions for safe handling: Avoid contact with eyes, skin, and clothing. Wash hands thoroughly after

handling. Provide adequate ventilation. Wear appropriate personal protective equipment. Observe good industrial hygiene practices.

Conditions for safe storage,

including any incompatibilities:

Store away from incompatible materials. Store in original tightly closed

container.

8. Exposure controls/personal protection

Control Parameters

Occupational Exposure Limits

Chemical Identity	type	Exposure Limit Values	Source
1-Methoxy-2-Propanol	TWA	50 ppm	US. ACGIH Threshold Limit Values



Revision Date: 07/28/2015

			(02 2013)
5	STEL	100 ppm	US. ACGIH Threshold Limit Values
			(02 2013)

Chemical name	type	Exposure Limit V	alues	Source
1-Methoxy-2-Propanol	TWA	50 ppm		Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007)
	STEL	75 ppm		Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007)
1-Methoxy-2-Propanol	TWAEV	100 ppm		Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (11 2010)
	STEL	150 ppm		Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (11 2010)
1-Methoxy-2-Propanol	TWA	100 ppm	369 mg/m3	Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (12 2008)
	STEL	150 ppm	553 mg/m3	Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (12 2008)

Appropriate Engineering Controls

Observe good industrial hygiene practices. Observe occupational exposure limits and minimize the risk of inhalation of vapors and mist. Mechanical

ventilation or local exhaust ventilation may be required.

Individual protection measures, such as personal protective equipment

General information: Use personal protective equipment as required.

Eye/face protection: Wear goggles/face shield.

Skin Protection

Hand Protection: Use suitable protective gloves if risk of skin contact.

Other: Wear chemical-resistant gloves, footwear, and protective clothing

appropriate for the risk of exposure. Contact health and safety professional

or manufacturer for specific information.

Respiratory Protection: In case of inadequate ventilation use suitable respirator. Seek advice from

local supervisor.

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

Avoid contact with skin. Observe good industrial hygiene practices.

9. Physical and chemical properties



Revision Date: 07/28/2015

Appearance

Physical state: liquid
Form: liquid
Color: White
Odor: Slight odor

Odor threshold:

pH:

No data available.

Flash Point:

No data available.

Slower than Ether

Flammability (solid, gas):

Upper/lower limit on flammability or explosive limits

Flammability limit - upper (%):

Flammability limit - lower (%):

Explosive limit - upper (%):

Explosive limit - lower (%):

No data available.

No data available.

Vapor pressure:

No data available.

Vapor density: Vapors are heavier than air and may travel along the floor and

in the bottom of containers.

Relative density: 1.1

Solubility(ies)

Solubility in water:
Solubility (other):

Partition coefficient (n-octanol/water):
No data available.
No data available.
No data available.
No data available.
Viscosity:
No data available.

10. Stability and reactivity

Reactivity: No data available.

Chemical Stability: Material is stable under normal conditions.

Possibility of Hazardous

Reactions:

No data available.

Conditions to Avoid: Avoid heat or contamination.

Incompatible Materials: Amines. Epoxides. Avoid contact with acids. Bases, alkalies (organic).

Hazardous Decomposition Thermal decomposition or combustion may liberate carbon oxides and

Products: other toxic gases or vapors.

11. Toxicological information

Information on likely routes of exposure

Ingestion: May be ingested by accident. Ingestion may cause irritation and malaise.



Revision Date: 07/28/2015

Inhalation: In high concentrations, vapors, fumes or mists may irritate nose, throat and

mucus membranes.

Skin Contact: May cause an allergic skin reaction.

Eye contact: Eye contact is possible and should be avoided.

Information on toxicological effects

Acute toxicity (list all possible routes of exposure)

Oral

Product: No data available.

Dermal

Product: ATEmix: 10,568.97 mg/kg

Inhalation

Product: No data available.

Repeated dose toxicity

Product: No data available.

Skin Corrosion/Irritation

Product: No data available.

Serious Eye Damage/Eye Irritation

Product: No data available.

Specified substance(s):

Bisphenol A

Polyglycidyl Ether

Resin

1-Methoxy-2-Propanol in vivo (Rabbit, 24 - 72 hrs): Not irritating

in vivo (Rabbit, 24 hrs): Slightly irritating

Respiratory or Skin Sensitization

Product: No data available.

Carcinogenicity

Product: No data available.

IARC Monographs on the Evaluation of Carcinogenic Risks to Humans:

No carcinogenic components identified

US. National Toxicology Program (NTP) Report on Carcinogens:

No carcinogenic components identified

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050):

No carcinogenic components identified



Revision Date: 07/28/2015

Germ Cell Mutagenicity

In vitro

Product: No data available.

In vivo

Product: No data available.

Reproductive toxicity

Product: No data available.

Specific Target Organ Toxicity - Single Exposure
Product:
No data available.

Specific Target Organ Toxicity - Repeated Exposure Product: No data available.

Aspiration Hazard

Product: No data available.

Other effects: No data available.

12. Ecological information

Ecotoxicity:

Acute hazards to the aquatic environment:

Fish

Product: No data available.

Aquatic Invertebrates

Product: No data available.

Chronic hazards to the aquatic environment:

Fish

Product: No data available.

Aquatic Invertebrates

Product: No data available.

Toxicity to Aquatic Plants

Product: No data available.

Persistence and Degradability

Biodegradation



Revision Date: 07/28/2015

Product: No data available.

BOD/COD Ratio

Product: No data available.

Bioaccumulative Potential

Bioconcentration Factor (BCF)

Product: No data available.

Partition Coefficient n-octanol / water (log Kow)

Product: No data available.

Mobility in Soil: No data available.

Other Adverse Effects: No data available.

13. Disposal considerations

Disposal instructions: Dispose of waste at an appropriate treatment and disposal facility in

accordance with applicable laws and regulations, and product

characteristics at time of disposal.

Contaminated Packaging: No data available.

14. Transport information

TDG:

Not Regulated

CFR / DOT:

Not Regulated

IMDG:

Not Regulated

15. Regulatory information

US Federal Regulations

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

None present or none present in regulated quantities.

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

None present or none present in regulated quantities.



Revision Date: 07/28/2015

CERCLA Hazardous Substance List (40 CFR 302.4):

<u>Chemical Identity</u> <u>Reportable quantity</u>

1-Methoxy-2-Propanol 100 lbs.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories

Immediate (Acute) Health Hazards

SARA 302 Extremely Hazardous Substance

None present or none present in regulated quantities.

SARA 304 Emergency Release Notification

Chemical Identity Reportable quantity

1-Methoxy-2-Propanol 100 lbs.

SARA 311/312 Hazardous Chemical

<u>Chemical Identity</u> <u>Threshold Planning Quantity</u>

Bisphenol A Polyglycidyl 500 lbs

Ether Resin

1-Methoxy-2-Propanol 500 lbs

SARA 313 (TRI Reporting)

None present or none present in regulated quantities.

Clean Water Act Section 311 Hazardous Substances (40 CFR 117.3)

None present or none present in regulated quantities.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130):

None present or none present in regulated quantities.

US State Regulations

US. California Proposition 65

No ingredient regulated by CA Prop 65 present.

US. New Jersey Worker and Community Right-to-Know Act

Chemical Identity

1-Methoxy-2-Propanol

US. Massachusetts RTK - Substance List

Chemical Identity

1-Methoxy-2-Propanol

US. Pennsylvania RTK - Hazardous Substances

Chemical Identity

1-Methoxy-2-Propanol

US. Rhode Island RTK

No ingredient regulated by RI Right-to-Know Law present.

Other Regulations:

When appropriately mixed with the other part, product has a VOC less water and exempt solvent

of:

68 g/l



Revision Date: 07/28/2015

Inventory Status:

Australia AICS: One or more components in this product are

not listed on or exempt from the Inventory.

Canada DSL Inventory List: All components in this product are listed on or

exempt from the Inventory.

EINECS, ELINCS or NLP: One or more components in this product are

not listed on or exempt from the Inventory.

Japan (ENCS) List:

One or more components in this product are

not listed on or exempt from the Inventory.

China Inv. Existing Chemical Substances:

One or more components in this product are

not listed on or exempt from the Inventory.

Korea Existing Chemicals Inv. (KECI): One or more components in this product are

not listed on or exempt from the Inventory.

Canada NDSL Inventory: One or more components in this product are

not listed on or exempt from the Inventory.

Philippines PICCS: One or more components in this product are

not listed on or exempt from the Inventory.

US TSCA Inventory:

All components in this product are listed on or

exempt from the Inventory.

New Zealand Inventory of Chemicals:

One or more components in this product are

not listed on or exempt from the Inventory.

Japan ISHL Listing: One or more components in this product are

not listed on or exempt from the Inventory.

Japan Pharmacopoeia Listing:

One or more components in this product are

not listed on or exempt from the Inventory.

16.Other information, including date of preparation or last revision

Revision Date: 07/28/2015

Version #: 1.0

Further Information: No data available.



Revision Date: 07/28/2015

Disclaimer:

For Industrial Use Only. Keep out of Reach of Children. The hazard information herein is offered solely for the consideration of the user, subject to their own investigation of compliance with applicable regulations, including the safe use of the product under every foreseeable condition.



Revision Date: 07/28/2015

SAFETY DATA SHEET

1. Identification

Product identifier: TREMprime Multi Surface Urethane Primer-Part B

Product Code: 252102 504

Recommended use and restriction on use

Recommended use: Sealant Restrictions on use: Not known.

Manufacturer/Importer/Supplier/Distributor Information

Tremco U.S Sealants 3735 Green Road Cleveland OH 44122 US

Contact person:EH&S DepartmentTelephone:216-292-5000

Emergency telephone number: 1-800-424-9300 (US); 1-613-996-6666 (Canada)

Category 1

2. Hazard(s) identification

Hazard Classification

Health Hazards

Skin sensitizer

Acute toxicity, oral	80.43 %

Acute toxicity, dermal 80.44 % Acute toxicity, inhalation, vapor 100 % Acute toxicity, inhalation, dust or mist 99 %

Acute hazards to the aquatic 99.98 %

environment

Chronic hazards to the aquatic 100 %

environment

Label Elements

Hazard Symbol:



Signal Word: Warning

Hazard Statement: May cause an allergic skin reaction.



Revision Date: 07/28/2015

Precautionary Statement

Prevention: Avoid breathing dust/fume/gas/mist/vapors/spray. Contaminated work

clothing must not be allowed out of the workplace. Wear protective

gloves/protective clothing/eye protection/face protection.

Response: IF ON SKIN: Wash with plenty of water. If skin irritation or rash occurs: Get

medical advice/attention. Specific treatment (see this label). Wash

contaminated clothing before reuse.

Disposal: Dispose of contents/container to an appropriate treatment and disposal

facility in accordance with applicable laws and regulations, and product

characteristics at time of disposal.

Other hazards which do not result in GHS classification:

None.

3. Composition/information on ingredients

Mixtures

Chemical Identity	CAS number	Content in percent (%)*
Isophoronediamine	2855-13-2	0.1 - 1%
m-Xylenediamine	1477-55-0	0.1 - 1%

^{*} All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

4. First-aid measures

Ingestion: Call a POISON CENTER/doctor/.../if you feel unwell. Rinse mouth.

Inhalation: Move to fresh air.

Skin Contact: If skin irritation occurs: Get medical advice/attention. Destroy or thoroughly

clean contaminated shoes. Immediately remove contaminated clothing and shoes and wash skin with soap and plenty of water. If skin irritation or an

allergic skin reaction develops, get medical attention.

Eye contact: Any material that contacts the eye should be washed out immediately with

water. If easy to do, remove contact lenses. If eye irritation persists: Get

medical advice/attention.

Most important symptoms/effects, acute and delayed

Symptoms: May cause skin and eye irritation.

Indication of immediate medical attention and special treatment needed

Treatment: Get medical attention if symptoms occur.

5. Fire-fighting measures

General Fire Hazards: No unusual fire or explosion hazards noted.

14/43



Revision Date: 07/28/2015

Suitable (and unsuitable) extinguishing media

Suitable extinguishing

media:

Use fire-extinguishing media appropriate for surrounding materials.

Unsuitable extinguishing

media:

Do not use water jet as an extinguisher, as this will spread the fire.

Specific hazards arising from

the chemical:

During fire, gases hazardous to health may be formed.

Special protective equipment and precautions for firefighters

Special fire fighting

procedures:

No data available.

Special protective equipment

for fire-fighters:

Self-contained breathing apparatus and full protective clothing must be

worn in case of fire.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures: See Section 8 of the SDS for Personal Protective Equipment. Do not touch damaged containers or spilled material unless wearing appropriate

protective clothing. Keep unauthorized personnel away.

Methods and material for containment and cleaning

up:

Dam and absorb spillages with sand, earth or other non-combustible material. Collect spillage in containers, seal securely and deliver for

disposal according to local regulations.

Notification Procedures: In the event of a spill or accidental release, notify relevant authorities in

accordance with all applicable regulations.

Environmental Precautions: Avoid release to the environment. Prevent further leakage or spillage if safe

to do so. Do not contaminate water sources or sewer. Environmental

manager must be informed of all major spillages.

7. Handling and storage

Precautions for safe handling: Avoid contact with eyes, skin, and clothing. Wash hands thoroughly after

handling. Provide adequate ventilation. Wear appropriate personal protective equipment. Observe good industrial hygiene practices.

Conditions for safe storage,

including any incompatibilities:

Store away from incompatible materials. Store in original tightly closed container.

8. Exposure controls/personal protection

Control Parameters

Occupational Exposure Limits

Chemical Identity	type	Exposure Limit Values	Source
m-Xylenediamine	Ceiling	0.1 mg/m3	US. ACGIH Threshold Limit Values



Revision Date: 07/28/2015

(2011)

Appropriate Engineering

Controls

Observe good industrial hygiene practices. Observe occupational exposure limits and minimize the risk of inhalation of vapors and mist. Mechanical

ventilation or local exhaust ventilation may be required.

Individual protection measures, such as personal protective equipment

General information: Use personal protective equipment as required.

Eye/face protection: Wear goggles/face shield.

Skin Protection

Hand Protection: Use suitable protective gloves if risk of skin contact.

Other: Wear chemical-resistant gloves, footwear, and protective clothing

appropriate for the risk of exposure. Contact health and safety professional

or manufacturer for specific information.

Respiratory Protection: In case of inadequate ventilation use suitable respirator. Seek advice from

local supervisor.

Hygiene measures: Observe good industrial hygiene practices. Contaminated work clothing

should not be allowed out of the workplace. Avoid contact with skin.

9. Physical and chemical properties

Appearance

Physical state: liquid
Form: liquid
Color: White
Odor: Slight odor

Odor threshold:No data available.pH:No data available.Melting point/freezing point:No data available.Initial boiling point and boiling range:> 100 °C > 212 °FFlash Point:No data available.Evaporation rate:Slower than Ether

Flammability (solid, gas):

No
Upper/lower limit on flammability or explosive limits

Flammability limit - upper (%):

Flammability limit - lower (%):

Explosive limit - upper (%):

Explosive limit - lower (%):

No data available.

No data available.

No data available.

No data available.

Vapor density: Vapors are heavier than air and may travel along the floor and

in the bottom of containers.

Relative density: 1.1

Solubility(ies)

Solubility in water: Miscible with water.
Solubility (other): No data available.



Revision Date: 07/28/2015

Partition coefficient (n-octanol/water):

Auto-ignition temperature:

No data available.

No data available.

No data available.

Viscosity:

No data available.

10. Stability and reactivity

Reactivity: No data available.

Chemical Stability: Material is stable under normal conditions.

Possibility of Hazardous

Reactions:

No data available.

Conditions to Avoid: Avoid heat or contamination.

Incompatible Materials: Amines. Epoxides. Avoid contact with acids. Bases, alkalies (organic).

Hazardous Decomposition

Products:

Thermal decomposition or combustion may liberate carbon oxides and

other toxic gases or vapors.

11. Toxicological information

Information on likely routes of exposure

Ingestion: May be ingested by accident. Ingestion may cause irritation and malaise.

Inhalation: In high concentrations, vapors, fumes or mists may irritate nose, throat and

mucus membranes.

Skin Contact: Causes mild skin irritation. May cause an allergic skin reaction.

Eye contact: Eye contact is possible and should be avoided.

Information on toxicological effects

Acute toxicity (list all possible routes of exposure)

Oral

Product: No data available.

Dermal

Product: No data available.

Inhalation

Product: No data available.

Repeated dose toxicity

Product: No data available.

Skin Corrosion/Irritation

Product: No data available.



Revision Date: 07/28/2015

Serious Eye Damage/Eye Irritation

Product: No data available.

Specified substance(s):

Isophoronediamine in vivo (Rabbit, 24 hrs): Strongly irritant and corrosive effect

Respiratory or Skin Sensitization

Product: No data available.

Carcinogenicity

Product: No data available.

IARC Monographs on the Evaluation of Carcinogenic Risks to Humans:

No carcinogenic components identified

US. National Toxicology Program (NTP) Report on Carcinogens:

No carcinogenic components identified

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050):

No carcinogenic components identified

Germ Cell Mutagenicity

In vitro

Product: No data available.

In vivo

Product: No data available.

Reproductive toxicity

Product: No data available.

Specific Target Organ Toxicity - Single Exposure

Product: No data available.

Specific Target Organ Toxicity - Repeated Exposure

Product: No data available.

Aspiration Hazard

Product: No data available.

Other effects: No data available.

12. Ecological information

Ecotoxicity:

Acute hazards to the aquatic environment:



Revision Date: 07/28/2015

Fish

Product: No data available.

Aquatic Invertebrates

Product: No data available.

Specified substance(s):

Isophoronediamine EC 50 (Water flea (Daphnia magna), 24 h): 31.9 - 45.8 mg/l Intoxication

Chronic hazards to the aquatic environment:

Fish

Product: No data available.

Aquatic Invertebrates

Product: No data available.

Toxicity to Aquatic Plants

Product: No data available.

Persistence and Degradability

Biodegradation

Product: No data available.

BOD/COD Ratio

Product: No data available.

Bioaccumulative Potential

Bioconcentration Factor (BCF)

Product: No data available.

Partition Coefficient n-octanol / water (log Kow)

Product: No data available.

Mobility in Soil: No data available.

Other Adverse Effects: No data available.

13. Disposal considerations

Disposal instructions: Dispose of waste at an appropriate treatment and disposal facility in

accordance with applicable laws and regulations, and product

characteristics at time of disposal.

Contaminated Packaging: No data available.



Revision Date: 07/28/2015

14. Transport information

TDG:

Not Regulated

CFR / DOT:

Not Regulated

IMDG:

Not Regulated

15. Regulatory information

US Federal Regulations

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

None present or none present in regulated quantities.

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

<u>Chemical Identity</u> <u>OSHA hazard(s)</u> Formaldehyde Acute toxicity

Skin irritation Skin sensitization Flammability

> respiratory tract irritation Respiratory sensitization

Cancer Eye irritation

CERCLA Hazardous Substance List (40 CFR 302.4):

<u>Chemical Identity</u> <u>Reportable quantity</u>

Ethylene glycol 5000 lbs. Potassium hydroxide 1000 lbs. Formaldehyde 100 lbs.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories

Immediate (Acute) Health Hazards

SARA 302 Extremely Hazardous Substance

Reportable

<u>Chemical Identity</u> <u>quantity</u> <u>Threshold Planning Quantity</u>

Formaldehyde 100 lbs. 500 lbs.



Revision Date: 07/28/2015

SARA 304 Emergency Release Notification

<u>Chemical Identity</u> <u>Reportable quantity</u>

Ethylene glycol 5000 lbs. Potassium hydroxide 1000 lbs. Formaldehyde 100 lbs.

SARA 311/312 Hazardous Chemical

<u>Chemical Identity</u> <u>Threshold Planning Quantity</u>

Formaldehyde 500lbs Isophoronediamine 500 lbs m-Xylenediamine 500 lbs

SARA 313 (TRI Reporting)

None present or none present in regulated quantities.

Clean Water Act Section 311 Hazardous Substances (40 CFR 117.3)

None present or none present in regulated quantities.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130):

<u>Chemical Identity</u> <u>Reportable quantity</u>

Formaldehyde 15000 lbs

US State Regulations

US. California Proposition 65

This product contains chemical(s) known to the State of California to cause cancer and/or to cause birth defects or other reproductive harm.

US. New Jersey Worker and Community Right-to-Know Act

No ingredient regulated by NJ Right-to-Know Law present.

US. Massachusetts RTK - Substance List

Chemical Identity

Formaldehyde

US. Pennsylvania RTK - Hazardous Substances

No ingredient regulated by PA Right-to-Know Law present.

US. Rhode Island RTK

No ingredient regulated by RI Right-to-Know Law present.

Other Regulations:

When appropriately mixed with the other part, product has a VOC less water and exempt solvent of:

68 g/l

Inventory Status:

Australia AICS: One or more components in this product are

not listed on or exempt from the Inventory.

Canada DSL Inventory List:

All components in this product are listed on or

exempt from the Inventory.

EINECS, ELINCS or NLP:

One or more components in this product are



Revision Date: 07/28/2015

not listed on or exempt from the Inventory.

Japan (ENCS) List: One or more components in this product are

not listed on or exempt from the Inventory.

China Inv. Existing Chemical Substances:

One or more components in this product are

not listed on or exempt from the Inventory.

Korea Existing Chemicals Inv. (KECI): One or more components in this product are

not listed on or exempt from the Inventory.

Canada NDSL Inventory: One or more components in this product are

not listed on or exempt from the Inventory.

Philippines PICCS: One or more components in this product are

not listed on or exempt from the Inventory.

US TSCA Inventory:

All components in this product are listed on or

exempt from the Inventory.

New Zealand Inventory of Chemicals:

One or more components in this product are

not listed on or exempt from the Inventory.

Japan ISHL Listing:

One or more components in this product are

not listed on or exempt from the Inventory.

Japan Pharmacopoeia Listing: One or more components in this product are

not listed on or exempt from the Inventory.

16.Other information, including date of preparation or last revision

Revision Date: 07/28/2015

Version #: 1.0

Further Information: No data available.

Disclaimer: For Industrial Use Only. Keep out of Reach of Children. The hazard

information herein is offered solely for the consideration of the user, subject to their own investigation of compliance with applicable regulations, including

the safe use of the product under every foreseeable condition.

TREMPrime Multi Surface Urethane Primer- Part A

TREMprime Multi Surface Urethane Primer-Part B



Revision Date: 07/28/2015

SAFETY DATA SHEET

1. Identification

Product identifier: TREMPrime Multi Surface Urethane Primer- Part A

Product Code: 252102 504

Recommended use and restriction on use

Recommended use: Sealant Restrictions on use: Not known.

Manufacturer/Importer/Supplier/Distributor Information

Tremco U.S Sealants 3735 Green Road Cleveland OH 44122 US

Contact person: **EH&S** Department Telephone: 216-292-5000

Emergency telephone number: 1-800-424-9300 (US); 1-613-996-6666 (Canada)

2. Hazard(s) identification

Hazard Classification

Health Hazards

Skin sensitizer Category 1

Unknown toxicity - Health

79.62 % Acute toxicity, oral Acute toxicity, dermal 79.62 % Acute toxicity, inhalation, vapor 100 % Acute toxicity, inhalation, dust or mist 99.3 %

Unknown toxicity - Environment

Acute hazards to the aquatic 99.3 % environment 100 % Chronic hazards to the aquatic environment

Label Elements

Hazard Symbol:



Signal Word: Warning

Hazard Statement: May cause an allergic skin reaction.



Revision Date: 07/28/2015

Precautionary Statement

Prevention: Avoid breathing dust/fume/gas/mist/vapors/spray. Contaminated work

clothing must not be allowed out of the workplace. Wear protective

gloves/protective clothing/eye protection/face protection.

Response: IF ON SKIN: Wash with plenty of water. If skin irritation or rash occurs: Get

medical advice/attention. Specific treatment (see this label). Wash

contaminated clothing before reuse.

Disposal: Dispose of contents/container to an appropriate treatment and disposal

facility in accordance with applicable laws and regulations, and product

characteristics at time of disposal.

Other hazards which do not result in GHS classification:

None.

3. Composition/information on ingredients

Mixtures

Chemical Identity	CAS number	Content in percent (%)*
Bisphenol A Polyglycidyl Ether Resin	25068-38-6	5 - 10%
1-Methoxy-2-Propanol	107-98-2	1 - 5%

^{*} All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

4. First-aid measures

Ingestion: Rinse mouth thoroughly.

Inhalation: Move to fresh air.

Skin Contact: Destroy or thoroughly clean contaminated shoes. Immediately remove

contaminated clothing and shoes and wash skin with soap and plenty of water. If skin irritation or an allergic skin reaction develops, get medical

attention.

Eye contact: Rinse immediately with plenty of water.

Most important symptoms/effects, acute and delayed

Symptoms: May cause skin and eye irritation.

Indication of immediate medical attention and special treatment needed

Treatment: Get medical attention if symptoms occur.

5. Fire-fighting measures

General Fire Hazards: No unusual fire or explosion hazards noted.



Revision Date: 07/28/2015

Suitable (and unsuitable) extinguishing media

Suitable extinguishing

media:

Use fire-extinguishing media appropriate for surrounding materials.

Unsuitable extinguishing

media:

Do not use water jet as an extinguisher, as this will spread the fire.

Specific hazards arising from

the chemical:

During fire, gases hazardous to health may be formed.

Special protective equipment and precautions for firefighters

Special fire fighting

procedures:

No data available.

Special protective equipment

for fire-fighters:

Self-contained breathing apparatus and full protective clothing must be

worn in case of fire.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures: See Section 8 of the SDS for Personal Protective Equipment. Do not touch damaged containers or spilled material unless wearing appropriate

protective clothing. Keep unauthorized personnel away.

Methods and material for containment and cleaning

up:

Dam and absorb spillages with sand, earth or other non-combustible material. Collect spillage in containers, seal securely and deliver for

disposal according to local regulations.

Notification Procedures: In the event of a spill or accidental release, notify relevant authorities in

accordance with all applicable regulations.

Environmental Precautions: Avoid release to the environment. Prevent further leakage or spillage if safe

to do so. Do not contaminate water sources or sewer. Environmental

manager must be informed of all major spillages.

7. Handling and storage

Precautions for safe handling: Avoid contact with eyes, skin, and clothing. Wash hands thoroughly after

handling. Provide adequate ventilation. Wear appropriate personal protective equipment. Observe good industrial hygiene practices.

Conditions for safe storage,

including any incompatibilities:

Store away from incompatible materials. Store in original tightly closed

container.

8. Exposure controls/personal protection

Control Parameters

Occupational Exposure Limits

Chemical Identity	type	Exposure Limit Values	Source
1-Methoxy-2-Propanol	TWA	50 ppm	US. ACGIH Threshold Limit Values



Revision Date: 07/28/2015

		(02 2013)
STEL	100 ppm	US. ACGIH Threshold Limit Values (02 2013)

Chemical name	type	Exposure Limit V	alues	Source
1-Methoxy-2-Propanol	TWA	50 ppm		Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007)
	STEL	75 ppm		Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007)
1-Methoxy-2-Propanol	TWAEV	100 ppm		Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (11 2010)
	STEL	150 ppm		Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (11 2010)
1-Methoxy-2-Propanol	TWA	100 ppm	369 mg/m3	Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (12 2008)
	STEL	150 ppm I	553 mg/m3	Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (12 2008)

Appropriate Engineering Controls

Observe good industrial hygiene practices. Observe occupational exposure limits and minimize the risk of inhalation of vapors and mist. Mechanical

ventilation or local exhaust ventilation may be required.

Individual protection measures, such as personal protective equipment

General information: Use personal protective equipment as required.

Eye/face protection: Wear goggles/face shield.

Skin Protection

Hand Protection: Use suitable protective gloves if risk of skin contact.

Other: Wear chemical-resistant gloves, footwear, and protective clothing

appropriate for the risk of exposure. Contact health and safety professional

or manufacturer for specific information.

Respiratory Protection: In case of inadequate ventilation use suitable respirator. Seek advice from

local supervisor.

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

Avoid contact with skin. Observe good industrial hygiene practices.

9. Physical and chemical properties



Revision Date: 07/28/2015

Appearance

Physical state: liquid
Form: liquid
Color: White
Odor: Slight odor

Odor threshold:

pH:

No data available.

Slower than Ether

Flammability (solid, gas):

Upper/lower limit on flammability or explosive limits

Flammability limit - upper (%):

Flammability limit - lower (%):

Explosive limit - upper (%):

Explosive limit - lower (%):

No data available.

No data available.

Vapor pressure:

No data available.

Vapor density: Vapors are heavier than air and may travel along the floor and

in the bottom of containers.

Relative density: 1.1

Solubility(ies)

Solubility in water:
Solubility (other):
No data available.

Partition coefficient (n-octanol/water):
No data available.
No data available.
No data available.

Pacomposition temperature:
No data available.
No data available.

Viscosity:
No data available.

10. Stability and reactivity

Reactivity: No data available.

Chemical Stability: Material is stable under normal conditions.

Possibility of Hazardous

Reactions:

No data available.

Conditions to Avoid: Avoid heat or contamination.

Incompatible Materials: Amines. Epoxides. Avoid contact with acids. Bases, alkalies (organic).

Hazardous Decomposition Thermal decomposition or combustion may liberate carbon oxides and

Products: other toxic gases or vapors.

11. Toxicological information

Information on likely routes of exposure

Ingestion: May be ingested by accident. Ingestion may cause irritation and malaise.



Revision Date: 07/28/2015

Inhalation: In high concentrations, vapors, fumes or mists may irritate nose, throat and

mucus membranes.

Skin Contact: May cause an allergic skin reaction.

Eye contact: Eye contact is possible and should be avoided.

Information on toxicological effects

Acute toxicity (list all possible routes of exposure)

Oral

Product: No data available.

Dermal

Product: ATEmix: 10,568.97 mg/kg

Inhalation

Product: No data available.

Repeated dose toxicity

Product: No data available.

Skin Corrosion/Irritation

Product: No data available.

Serious Eye Damage/Eye Irritation

Product: No data available.

Specified substance(s):

Bisphenol A

Polyglycidyl Ether

Resin

1-Methoxy-2-Propanol in vivo (Rabbit, 24 - 72 hrs): Not irritating

in vivo (Rabbit, 24 hrs): Slightly irritating

Respiratory or Skin Sensitization

Product: No data available.

Carcinogenicity

Product: No data available.

IARC Monographs on the Evaluation of Carcinogenic Risks to Humans:

No carcinogenic components identified

US. National Toxicology Program (NTP) Report on Carcinogens:

No carcinogenic components identified

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050):

No carcinogenic components identified



Revision Date: 07/28/2015

Germ Cell Mutagenicity

In vitro

Product: No data available.

In vivo

Product: No data available.

Reproductive toxicity

Product: No data available.

Specific Target Organ Toxicity - Single Exposure
Product:
No data available.

Specific Target Organ Toxicity - Repeated Exposure Product: No data available.

Aspiration Hazard

Product: No data available.

Other effects: No data available.

12. Ecological information

Ecotoxicity:

Acute hazards to the aquatic environment:

Fish

Product: No data available.

Aquatic Invertebrates

Product: No data available.

Chronic hazards to the aquatic environment:

Fish

Product: No data available.

Aquatic Invertebrates

Product: No data available.

Toxicity to Aquatic Plants

Product: No data available.

Persistence and Degradability

Biodegradation



Revision Date: 07/28/2015

Product: No data available.

BOD/COD Ratio

Product: No data available.

Bioaccumulative Potential

Bioconcentration Factor (BCF)

Product: No data available.

Partition Coefficient n-octanol / water (log Kow)

Product: No data available.

Mobility in Soil: No data available.

Other Adverse Effects: No data available.

13. Disposal considerations

Disposal instructions: Dispose of waste at an appropriate treatment and disposal facility in

accordance with applicable laws and regulations, and product

characteristics at time of disposal.

Contaminated Packaging: No data available.

14. Transport information

TDG:

Not Regulated

CFR / DOT:

Not Regulated

IMDG:

Not Regulated

15. Regulatory information

US Federal Regulations

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

None present or none present in regulated quantities.

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

None present or none present in regulated quantities.



Revision Date: 07/28/2015

CERCLA Hazardous Substance List (40 CFR 302.4):

Chemical Identity Reportable quantity

1-Methoxy-2-Propanol 100 lbs.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories

Immediate (Acute) Health Hazards

SARA 302 Extremely Hazardous Substance

None present or none present in regulated quantities.

SARA 304 Emergency Release Notification

Reportable quantity Chemical Identity

1-Methoxy-2-Propanol 100 lbs.

SARA 311/312 Hazardous Chemical

Chemical Identity **Threshold Planning Quantity**

Bisphenol A Polyglycidyl 500 lbs

Ether Resin

1-Methoxy-2-Propanol 500 lbs

SARA 313 (TRI Reporting)

None present or none present in regulated quantities.

Clean Water Act Section 311 Hazardous Substances (40 CFR 117.3)

None present or none present in regulated quantities.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130):

None present or none present in regulated quantities.

US State Regulations

US. California Proposition 65

No ingredient regulated by CA Prop 65 present.

US. New Jersey Worker and Community Right-to-Know Act

Chemical Identity

1-Methoxy-2-Propanol

US. Massachusetts RTK - Substance List

Chemical Identity

1-Methoxy-2-Propanol

US. Pennsylvania RTK - Hazardous Substances

Chemical Identity

1-Methoxy-2-Propanol

US. Rhode Island RTK

No ingredient regulated by RI Right-to-Know Law present.

Other Regulations:

When appropriately mixed with the other part, product has a VOC less water and exempt solvent

of:

68 g/l



Revision Date: 07/28/2015

Inventory Status:

Australia AICS: One or more components in this product are

not listed on or exempt from the Inventory.

Canada DSL Inventory List: All components in this product are listed on or

exempt from the Inventory.

EINECS, ELINCS or NLP: One or more components in this product are

not listed on or exempt from the Inventory.

Japan (ENCS) List:

One or more components in this product are

not listed on or exempt from the Inventory.

China Inv. Existing Chemical Substances:

One or more components in this product are

not listed on or exempt from the Inventory.

Korea Existing Chemicals Inv. (KECI): One or more components in this product are

not listed on or exempt from the Inventory.

Canada NDSL Inventory: One or more components in this product are

not listed on or exempt from the Inventory.

Philippines PICCS: One or more components in this product are

not listed on or exempt from the Inventory.

US TSCA Inventory:

All components in this product are listed on or

exempt from the Inventory.

New Zealand Inventory of Chemicals:

One or more components in this product are

not listed on or exempt from the Inventory.

Japan ISHL Listing: One or more components in this product are

not listed on or exempt from the Inventory.

Japan Pharmacopoeia Listing:

One or more components in this product are

not listed on or exempt from the Inventory.

16.Other information, including date of preparation or last revision

Revision Date: 07/28/2015

Version #: 1.0

Further Information: No data available.



Revision Date: 07/28/2015

Disclaimer:

For Industrial Use Only. Keep out of Reach of Children. The hazard information herein is offered solely for the consideration of the user, subject to their own investigation of compliance with applicable regulations, including the safe use of the product under every foreseeable condition.



Revision Date: 07/28/2015

SAFETY DATA SHEET

1. Identification

Product identifier: TREMprime Multi Surface Urethane Primer-Part B

Product Code: 252102 504

Recommended use and restriction on use

Recommended use: Sealant Restrictions on use: Not known.

Manufacturer/Importer/Supplier/Distributor Information

Tremco U.S Sealants 3735 Green Road Cleveland OH 44122 US

Contact person: **EH&S** Department Telephone: 216-292-5000

Emergency telephone number: 1-800-424-9300 (US); 1-613-996-6666 (Canada)

2. Hazard(s) identification

Hazard Classification

Health Hazards

Skin sensitizer	Category 1

Acute toxicity, oral	80.43 %
Acute toxicity, dermal	80.44 %
Acute toxicity, inhalation, vapor	100 %
Acute toxicity, inhalation, dust or mist	99 %

99.98 % Acute hazards to the aquatic environment

Chronic hazards to the aquatic 100 %

environment

Label Elements

Hazard Symbol:



Signal Word: Warning

Hazard Statement: May cause an allergic skin reaction.



Revision Date: 07/28/2015

Precautionary Statement

Prevention: Avoid breathing dust/fume/gas/mist/vapors/spray. Contaminated work

clothing must not be allowed out of the workplace. Wear protective

gloves/protective clothing/eye protection/face protection.

Response: IF ON SKIN: Wash with plenty of water. If skin irritation or rash occurs: Get

medical advice/attention. Specific treatment (see this label). Wash

contaminated clothing before reuse.

Disposal: Dispose of contents/container to an appropriate treatment and disposal

facility in accordance with applicable laws and regulations, and product

characteristics at time of disposal.

Other hazards which do not result in GHS classification:

None.

3. Composition/information on ingredients

Mixtures

Chemical Identity	CAS number	Content in percent (%)*
Isophoronediamine	2855-13-2	0.1 - 1%
m-Xylenediamine	1477-55-0	0.1 - 1%

^{*} All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

4. First-aid measures

Ingestion: Call a POISON CENTER/doctor/.../if you feel unwell. Rinse mouth.

Inhalation: Move to fresh air.

Skin Contact: If skin irritation occurs: Get medical advice/attention. Destroy or thoroughly

clean contaminated shoes. Immediately remove contaminated clothing and shoes and wash skin with soap and plenty of water. If skin irritation or an

allergic skin reaction develops, get medical attention.

Eye contact: Any material that contacts the eye should be washed out immediately with

water. If easy to do, remove contact lenses. If eye irritation persists: Get

medical advice/attention.

Most important symptoms/effects, acute and delayed

Symptoms: May cause skin and eye irritation.

Indication of immediate medical attention and special treatment needed

Treatment: Get medical attention if symptoms occur.

5. Fire-fighting measures

General Fire Hazards: No unusual fire or explosion hazards noted.

35/43



Revision Date: 07/28/2015

Suitable (and unsuitable) extinguishing media

Suitable extinguishing

media:

Use fire-extinguishing media appropriate for surrounding materials.

Unsuitable extinguishing

media:

Do not use water jet as an extinguisher, as this will spread the fire.

Specific hazards arising from

the chemical:

During fire, gases hazardous to health may be formed.

Special protective equipment and precautions for firefighters

Special fire fighting

procedures:

No data available.

Special protective equipment

for fire-fighters:

Self-contained breathing apparatus and full protective clothing must be

worn in case of fire.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures: See Section 8 of the SDS for Personal Protective Equipment. Do not touch

damaged containers or spilled material unless wearing appropriate

protective clothing. Keep unauthorized personnel away.

Methods and material for containment and cleaning

up:

Dam and absorb spillages with sand, earth or other non-combustible material. Collect spillage in containers, seal securely and deliver for

disposal according to local regulations.

Notification Procedures: In the event of a spill or accidental release, notify relevant authorities in

accordance with all applicable regulations.

Environmental Precautions: Avoid release to the environment. Prevent further leakage or spillage if safe

to do so. Do not contaminate water sources or sewer. Environmental

manager must be informed of all major spillages.

7. Handling and storage

Precautions for safe handling: Avoid contact with eyes, skin, and clothing. Wash hands thoroughly after

handling. Provide adequate ventilation. Wear appropriate personal protective equipment. Observe good industrial hygiene practices.

Conditions for safe storage,

including any incompatibilities:

Store away from incompatible materials. Store in original tightly closed container.

8. Exposure controls/personal protection

Control Parameters

Occupational Exposure Limits

Chemical Identity	type	Exposure Limit Values	Source	
m-Xylenediamine	Ceiling	0.1 mg/m3	US. ACGIH Threshold Limit Values	



Revision Date: 07/28/2015

(2011)

Appropriate Engineering

Controls

Observe good industrial hygiene practices. Observe occupational exposure limits and minimize the risk of inhalation of vapors and mist. Mechanical

ventilation or local exhaust ventilation may be required.

Individual protection measures, such as personal protective equipment

General information: Use personal protective equipment as required.

Eye/face protection: Wear goggles/face shield.

Skin Protection

Hand Protection: Use suitable protective gloves if risk of skin contact.

Other: Wear chemical-resistant gloves, footwear, and protective clothing

appropriate for the risk of exposure. Contact health and safety professional

or manufacturer for specific information.

Respiratory Protection: In case of inadequate ventilation use suitable respirator. Seek advice from

local supervisor.

Observe good industrial hygiene practices. Contaminated work clothing Hygiene measures:

should not be allowed out of the workplace. Avoid contact with skin.

9. Physical and chemical properties

Appearance

Physical state: liquid Form: liquid Color: White Odor: Slight odor

Odor threshold: No data available. pH: No data available. Melting point/freezing point: No data available. Initial boiling point and boiling range: > 100 °C > 212 °F Flash Point: No data available. **Evaporation rate:** Slower than Ether

Flammability (solid, gas): No Upper/lower limit on flammability or explosive limits

Flammability limit - upper (%): No data available. Flammability limit - lower (%): No data available. No data available. **Explosive limit - upper (%):** Explosive limit - lower (%): No data available.

Vapor pressure: No data available.

Vapor density: Vapors are heavier than air and may travel along the floor and

in the bottom of containers.

Relative density: 1.1

Solubility(ies)

Miscible with water. Solubility in water: No data available. Solubility (other):



Revision Date: 07/28/2015

Partition coefficient (n-octanol/water):

Auto-ignition temperature:

No data available.

No data available.

No data available.

Viscosity:

No data available.

No data available.

10. Stability and reactivity

Reactivity: No data available.

Chemical Stability: Material is stable under normal conditions.

Possibility of Hazardous

Reactions:

No data available.

Conditions to Avoid: Avoid heat or contamination.

Incompatible Materials: Amines. Epoxides. Avoid contact with acids. Bases, alkalies (organic).

Hazardous Decomposition

Products:

Thermal decomposition or combustion may liberate carbon oxides and

other toxic gases or vapors.

11. Toxicological information

Information on likely routes of exposure

Ingestion: May be ingested by accident. Ingestion may cause irritation and malaise.

Inhalation: In high concentrations, vapors, fumes or mists may irritate nose, throat and

mucus membranes.

Skin Contact: Causes mild skin irritation. May cause an allergic skin reaction.

Eye contact: Eye contact is possible and should be avoided.

Information on toxicological effects

Acute toxicity (list all possible routes of exposure)

Oral

Product: No data available.

Dermal

Product: No data available.

Inhalation

Product: No data available.

Repeated dose toxicity

Product: No data available.

Skin Corrosion/Irritation

Product: No data available.



Revision Date: 07/28/2015

Serious Eye Damage/Eye Irritation

Product: No data available.

Specified substance(s):

Isophoronediamine in vivo (Rabbit, 24 hrs): Strongly irritant and corrosive effect

Respiratory or Skin Sensitization

Product: No data available.

Carcinogenicity

Product: No data available.

IARC Monographs on the Evaluation of Carcinogenic Risks to Humans:

No carcinogenic components identified

US. National Toxicology Program (NTP) Report on Carcinogens:

No carcinogenic components identified

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050):

No carcinogenic components identified

Germ Cell Mutagenicity

In vitro

Product: No data available.

In vivo

Product: No data available.

Reproductive toxicity

Product: No data available.

Specific Target Organ Toxicity - Single Exposure

Product: No data available.

Specific Target Organ Toxicity - Repeated Exposure

Product: No data available.

Aspiration Hazard

Product: No data available.

Other effects: No data available.

12. Ecological information

Ecotoxicity:

Acute hazards to the aquatic environment:



Revision Date: 07/28/2015

Fish

Product: No data available.

Aquatic Invertebrates

Product: No data available.

Specified substance(s):

Isophoronediamine EC 50 (Water flea (Daphnia magna), 24 h): 31.9 - 45.8 mg/l Intoxication

Chronic hazards to the aquatic environment:

Fish

Product: No data available.

Aquatic Invertebrates

Product: No data available.

Toxicity to Aquatic Plants

Product: No data available.

Persistence and Degradability

Biodegradation

Product: No data available.

BOD/COD Ratio

Product: No data available.

Bioaccumulative Potential

Bioconcentration Factor (BCF)

Product: No data available.

Partition Coefficient n-octanol / water (log Kow)

Product: No data available.

Mobility in Soil: No data available.

Other Adverse Effects: No data available.

13. Disposal considerations

Disposal instructions: Dispose of waste at an appropriate treatment and disposal facility in

accordance with applicable laws and regulations, and product

characteristics at time of disposal.

Contaminated Packaging: No data available.



Revision Date: 07/28/2015

14. Transport information

TDG:

Not Regulated

CFR / DOT:

Not Regulated

IMDG:

Not Regulated

15. Regulatory information

US Federal Regulations

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

None present or none present in regulated quantities.

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

<u>Chemical Identity</u> <u>OSHA hazard(s)</u> Formaldehyde Acute toxicity

Acute toxicity
Skin irritation
Skin sensitization
Flammability

respiratory tract irritation Respiratory sensitization

Cancer Eye irritation

CERCLA Hazardous Substance List (40 CFR 302.4):

<u>Chemical Identity</u> <u>Reportable quantity</u>

Ethylene glycol 5000 lbs. Potassium hydroxide 1000 lbs. Formaldehyde 100 lbs.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories

Immediate (Acute) Health Hazards

SARA 302 Extremely Hazardous Substance

Reportable

<u>Chemical Identity</u> <u>quantity</u> <u>Threshold Planning Quantity</u>

Formaldehyde 100 lbs. 500 lbs.



Revision Date: 07/28/2015

SARA 304 Emergency Release Notification

<u>Chemical Identity</u> <u>Reportable quantity</u>

Ethylene glycol 5000 lbs. Potassium hydroxide 1000 lbs. Formaldehyde 100 lbs.

SARA 311/312 Hazardous Chemical

<u>Chemical Identity</u> <u>Threshold Planning Quantity</u>

Formaldehyde 500lbs Isophoronediamine 500 lbs m-Xylenediamine 500 lbs

SARA 313 (TRI Reporting)

None present or none present in regulated quantities.

Clean Water Act Section 311 Hazardous Substances (40 CFR 117.3)

None present or none present in regulated quantities.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130):

Chemical Identity Reportable quantity

Formaldehyde 15000 lbs

US State Regulations

US. California Proposition 65

This product contains chemical(s) known to the State of California to cause cancer and/or to cause birth defects or other reproductive harm.

US. New Jersey Worker and Community Right-to-Know Act

No ingredient regulated by NJ Right-to-Know Law present.

US. Massachusetts RTK - Substance List

Chemical Identity

Formaldehyde

US. Pennsylvania RTK - Hazardous Substances

No ingredient regulated by PA Right-to-Know Law present.

US. Rhode Island RTK

No ingredient regulated by RI Right-to-Know Law present.

Other Regulations:

When appropriately mixed with the other part, product has a VOC less water and exempt solvent of:

68 g/l

Inventory Status:

Australia AICS: One or more components in this product are

not listed on or exempt from the Inventory.

Canada DSL Inventory List: All components in this product are listed on or

exempt from the Inventory.

EINECS, ELINCS or NLP:

One or more components in this product are



Revision Date: 07/28/2015

not listed on or exempt from the Inventory.

Japan (ENCS) List: One or more components in this product are

not listed on or exempt from the Inventory.

China Inv. Existing Chemical Substances:

One or more components in this product are

not listed on or exempt from the Inventory.

Korea Existing Chemicals Inv. (KECI): One or more components in this product are

not listed on or exempt from the Inventory.

Canada NDSL Inventory:

One or more components in this product are

not listed on or exempt from the Inventory.

Philippines PICCS: One or more components in this product are

not listed on or exempt from the Inventory.

US TSCA Inventory:

All components in this product are listed on or

exempt from the Inventory.

New Zealand Inventory of Chemicals:

One or more components in this product are

not listed on or exempt from the inventory.

Japan ISHL Listing:

One or more components in this product are

not listed on or exempt from the Inventory.

Japan Pharmacopoeia Listing:

One or more components in this product are

not listed on or exempt from the Inventory.

16.Other information, including date of preparation or last revision

Revision Date: 07/28/2015

Version #: 1.0

Further Information: No data available.

Disclaimer: For Industrial Use Only. Keep out of Reach of Children. The hazard

information herein is offered solely for the consideration of the user, subject to their own investigation of compliance with applicable regulations, including

the safe use of the product under every foreseeable condition.