



FLOWSHIELD SL/QUARTZ – FLOWTEX HARDENER B

MATERIAL SAFETY DATA SHEET

Date Issued: 05/17/2010

Revision 1 – Date Revised: 05/16/2012

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND COMPANY

Product Name Flowshield SL/Quartz – Flowtex Hardener B

Application Amine hardener component of trowel down and self leveling flooring systems

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(24 HR.) CHEMTREC (Outside USA): (703) 527 – 3887

2. COMPOSITION/INFORMATION ON INGREDIENTS

General description: Preparation

Chemical Name	CAS No.	%	OSHA PEL	ACGIH TLV
Isophorone diamine	2855-13-2	30-50	no limits set	no limits set
Benzyl alcohol	100-51-6	30-50	no limits set	no limits set
Benzen-1,3-dimethaneamine (MXDA)	1477-55-0	< 15	15 mg/m3	10 mg/m3

3. HAZARDS IDENTIFICATION

Human health hazards Causes burns. Harmful in contact with skin and if swallowed. Harmful by inhalation (is valid at increased temperature and at spraying). May cause sensitization by skin contact.

Environmental hazards Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

4. FIRST- AID MEASURES

General information In case of accident or if you feel unwell, seek medical advice immediately. Bring the safety data sheet. Never give anything by mouth to an unconscious person.

Ingestion Wash out mouth with water. Drink plenty of water. Do not induce vomiting. Immediately get medical attention.

Skin contact Immediately remove contaminated clothing. Immediately wash off with plenty of water and soap.

Eye contact Remove any contact lenses. Wash the eyes with plenty of water for at least 15 minutes, with the eyelid held wide open. Immediately get medical attention.

5. FIRE-FIGHTING MEASURES

Flashpoint >212 °F (>100°C).

Explosion limits Not applicable.

Suitable extinguishing media Dry chemical, alcohol-resistant foam, water spray, carbon dioxide.

Hazardous thermal (de)composition products Carbon monoxide, carbon dioxide and nitrogen compounds.

Protection of fire-fighters Use breathing apparatus.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions Avoid contact with skin and eyes. Do not breathe vapor and spray. Use appropriate protection (see section 8). Keep unauthorized people away.

Environmental precautions Avoid release to the environment. In the event of major spillage: Immediately contact fire brigade and police.

Methods for cleaning up Collect spilled material. Absorb remainder in sand or other inert material. Forward for disposal (see section 13).

7. HANDLING AND STORAGE

Handling Avoid contact with skin and eyes. Avoid temperatures above 104 °F (40 °C). Irritating vapor can be formed when heated. Don't spray, could cause harmful mist. Use only in well-ventilated areas. For instruction for application, see separate product information. Any national regulations about epoxy products should be followed (see section 15).

Storage Keep container tightly closed and dry. Protect from direct sunlight. Keep at 60-104 °F (15-40 °C). Keep away from acids.

8. EXPOSURE CONTROL/PERSONAL PROTECTION

Engineering measures	Use only in well-ventilated areas.
Personal protective equipment	
Respiratory System	In case of insufficient ventilation, wear suitable respiratory equipment.
Skin and body	Wear suitable protective clothing (full protective clothing).
Hands	Wear suitable gloves.
Eyes	Safety goggles or face shield.
Other protective equipment	Eye wash facility. Emergency shower.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state	Liquid	Color	Light-yellow, clear
Odor	amine-like	Boiling point	>302 °F (>150 °C)
Density	ca. 1.05 g/cm ³	Solubility in water	Limited
pH	11-12	Flash point	>212 °F (>100 °C)
Explosion Properties	Not explosive		

10. STABILITY AND REACTIVITY

Stability	Stable under recommended storage and handling conditions. Decomposes at high temperatures.
Conditions to avoid	Avoid temperatures above 104 °F (40 °C).
Materials to avoid	Oxidizing agents and acids.
Hazardous reactions	Reacts with acid developing heat.
Hazardous decomposition products	Not known but at fire.

11. TOXICOLOGICAL INFORMATION

Inhalation	At recommended storage and handling conditions, the risk of inhalation of hazardous vapor or spray is considered to be small. Inhalation of vapor or mist may result in smarting pain, cough, headache, nausea, tiredness and dizziness.
Ingestion	Harmful if swallowed. May result in pain (mouth, pharynx and stomach). May cause burns. May result in headache, nausea, tiredness, dizziness, vomiting and diarrhea.
Skin contact	Causes burns. Dehydrating on skin.
Eye contact	Causes burns. Results in pain and ulceration. May cause irreversible damage to the eyes.
Sensitization	Prolonged or repeated skin contact may result in allergic eczema.

Information on ingredients

Chemical name	Isophorone diamine
Acute Toxicity - Oral	LD ₅₀ , oral rat: 1030 mg/kg.
Sensitization	May cause sensitization with allergic eczema.

Chemical name	Benzyl alcohol
Acute Toxicity - Oral	LD ₅₀ , oral rat: 1230 mg/kg.
Acute Toxicity - Dermal	LD ₅₀ , skin rabbit: 2000 mg/kg.

12. ECOLOGICAL INFORMATION

Do not allow to enter waste water canal, waterways or soil.

Information on ingredients:

Chemical name	Isophorone diamine
Persistence/degradability	The substance is poorly biodegradable.
Ecotoxicity	Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment. LC ₅₀ fish (Leuciscus idus, 48 h): 185 mg/l. EC ₅₀ Daphnia magna (24 h): 42 mg/l.

13. DISPOSAL CONSIDERATIONS

Waste of residues	Disposal according to the local, state and federal legislation. Forward for disposal. Curing is recommended.
Contaminated packaging	Disposal according to the local, state and federal legislation.
Other information	Any national regulations about epoxy products should be followed (see section15).

14. TRANSPORT INFORMATION

DOT regulations	
Identification number	UN2289
Proper shipping name (technical name)	ISOPHORONEDIAMINE SOLUTION.
Hazard class	8

Packing group III
 Label 8
 Reportable Quantity 1001 lbs.
 NMFC Item # 044155-08

International transport regulations Road (ADR), Railway (RID), Sea (IMDG), Air (IATA)

UN number 2289
 Proper shipping name ISOPHORONEDIAMINE SOLUTION.
 Class 8
 Packing group III

15. REGULATORY INFORMATION

US EPA TSCA Status All chemical ingredients are listed on the TSCA inventory.
Canada Domestic All chemical ingredients are listed on the DSL

Risk phrases Causes burns [=R34].
 Harmful by inhalation, in contact with skin and if swallowed [=R20/21/22].
 May cause sensitization by skin contact [=R43].
 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment [=R52/53].

Safety phrases In case of contact with eyes, rinse immediately with plenty of water and seek medical advice [=S26].
 Wear suitable protective clothing, gloves and eye/face protection [=S36/37/39].
 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible) [=S45].
 Avoid release to the environment. Refer to special instructions/Safety data sheets [=S61].
 Do not induce vomiting.

Contains Isophorone diamine.
 Benzyl alcohol.
 Benzene-1, 3-dimethaneamine (MXDA).

CERCLA – SARA Hazard Category SARA Section 313 This product has been reviewed according to the EPA 'Hazard Categories' promulgated under Sections 311 and 312 of the SARA Title III 1986 and is considered under applicable definitions to meet the following categories: None.
 This product contains the following substances subject to the reporting requirements of Section 313 of Title III of the SARA 1986 and 40 CFR part 372: None.

Toxic Substances Control Act Definition This product contains the following chemical substances subject to the reporting requirements of TSCA 12 (B) if exported from the United States: None.
 SARA – Superfund Amendment Reauthorization Act.

16. OTHER INFORMATION

This product is used together with Flowshield SL Base A and Filler C. Base A and Hardener B react while developing heat. Complete curing time is 5-7 days. For instructions for application, see separate product information. See also separate safety data sheet for comp A.

HMIS Ratings

Health 3
Flammability 1
Reactivity 0
Personal protection -

The ratings assigned by Flowcrete are only suggested ratings; the contractor/employer has ultimate responsibility for HMIS rating where this system is used.

Personal Protection

This code is left blank as it depends on application technique and the workplace ventilation.
 Please read this MSDS before deciding on appropriate protective equipment and beginning work.
 There are codes available for this section which can be obtained from Labelmaster.

History

Version Country / Language United States / English
Date previous issue -
Changes in comparison with the previous issue

This safety data sheet is based on Flowcrete North America Inc's present knowledge and experience, and is intended to serve as a guide for safe handling of the product regarding to health and environmental aspects.