

Distributor:

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# Safety Data Sheet (SDS): LiquaTile 1172 Hardener

## Section 1 - Product and Company Identification

Product Name: LiquaTile 1172 Hardener (All Versions)

toll vendor/formulator:  
Wolverine Coatings Corporation  
140 Metro Drive  
Spartanburg, SC 29303

### Emergency Contact:

ChemTel 24 Hr. US Emergency Number: 1-800-255-3924  
ChemTel 24 Hr. Worldwide Emergency Number: +1-813-248-0585

Product Use: Coatings  
Not recommended for: None Identified

## Section 2 - Hazards Identification

### GHS Ratings

Skin Corrosive	1B	Destruction of dermal tissue: Exposure < 1 hour Observation < 14 days, visible necrosis in at least one animal
Eye Corrosive	1	Serious eye damage: Irreversible damage 21 days after exposure, Draize score: Corneal opacity >= 3, Iritis > 1.5
Skin Sensitizer	1	Skin sensitizer

### GHS Hazards

H314	Causes severe skin burns and eye damage
H317	May cause an allergic skin reaction
H318	Causes serious eye damage

### GHS Precautions

P260	Do not breathe dust/fume/gas/mist/vapours/spray
P261	Avoid breathing dust/fume/gas/mist/vapours/spray
P264	Wash thoroughly after handling
P272	Contaminated work clothing should not be allowed out of the workplace
P280	Wear protective gloves/protective clothing/eye protection/face protection
P310	Immediately call a POISON CENTER or doctor/physician
P321	Specific treatment (see label)
P363	Wash contaminated clothing before reuse
P301+P330+P331	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting
P302+P352	IF ON SKIN: Wash with soap and water
P303+P361+P353	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower
P304+P340	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
P305+P351+P338	IF IN EYES: Rinse continuously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing
P333+P313	If skin irritation or a rash occurs: Get medical advice/attention
P405	Store locked up
P501	Dispose of contents/container in accordance with all local, regional, national, and international regulations.

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Signal Word: Danger



## Section 3 - Composition / Information on Ingredients

Chemical Name	CAS Number	Weight Concentration
Quartz	14808-60-7	30.00% - 40.00%
Trade Secret	N/A	10.00% - 20.00%
Hydrous magnesium silicate	14807-96-6	5.00% - 10.00%
Isophorone diamine	2855-13-2	5.00% - 10.00%
Polyoxypropylenediamine	9046-10-0	5.00% - 10.00%
Benzyl Alcohol	100-51-6	5.00% - 10.00%
4,4'-Isopropylidenediphenol-Epichlorohydrin Copolymer	25068-38-6	1.00% - 5.00%
Aluminum Oxide	1344-28-1	1.00% - 5.00%
Trade Secret	N/A	1.00% - 5.00%
Silicones and Siloxanes, dimethyl-, reaction products with silica	67762-90-7	1.00% - 5.00%

## Section 4 – First Aid Measures

**Inhalation:** If affected, remove to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Get medical attention.

**Eye Contact:** Immediately flush eyes for at least fifteen minutes with running water. Hold eyelids apart to ensure rinsing of the entire eye surface and lids with water. If eye irritation persists: Get medical advice/attention.

**Skin contact:** Immediately remove contaminated clothing and shoes. Wash affected areas thoroughly with soap and water. If irritation develops, seek medical attention.

**Ingestion:** Do not induce vomiting. Never give anything by mouth to an unconscious person. If a person vomits when lying on his back, place him in the recovery position. Get immediate medical attention.

## Section 5 – Fire Fighting Measures

Flash Point: 100C (212F)

LEL: Not Available

UEL: Not Available

**Extinguishing Media:** Use carbon dioxide, foam, dry chemical, dry sand, water fog, or limestone powder extinguishing systems.

**Hazardous combustion products:** Irritating or toxic substances may be emitted upon burning, combustion or decomposition. See section 10 (Stability and Reactivity) for additional information.

**Special Fire Fighting Procedures:** Firefighters should be equipped with self-contained breathing apparatus.

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### Section 6 - Accidental Release Measures

Spill and Leak Procedures: Avoid all personal contact. Ensure cleanup personnel wear all appropriate Personal Protective Equipment (PPE), including respiratory protection. Spills should be contained, solidified, and placed in suitable containers for disposal.

### Section 7 - Handling and Storage

Handling Precautions: Use good laboratory/workplace procedures. Wash thoroughly after handling this product. Always wash up before eating, smoking or using the facilities. Use under well-ventilated conditions. Avoid eye and skin contact. Avoid inhalation of aerosol, mist, spray, fume or vapor. Avoid drinking, tasting, swallowing or ingesting this product. Wash contaminated clothing before reuse. Discard shoes contaminated with this product.

Storage Requirements: Keep away from heat, sparks, and open flames. Store cool and dry, under well-ventilated conditions. Store this material away from incompatible substances (see section 10). Do not store in open, unlabeled or mislabeled containers. Keep container closed when not in use.

### Section 8 – Exposure Controls / Personal Protection

Chemical Name / CAS No.	OSHA Exposure Limits	ACGIH Exposure Limits	Other Exposure Limits
Quartz 14808-60-7	TWA30 mg/m3 / %SiO2+2 total dust TWA: 10 mg/m3 /%SiO2+2 respirable fraction	TWA: 0.025 mg/m3	Not Established
Trade Secret	Not Established	Not Established	Not Established
Hydrous magnesium silicate 14807-96-6	TWA: 20 million particles per ft3	TWA: 2 mg/m3	Not Established
Isophorone diamine 2855-13-2	Not Established	Not Established	Not Established
Polyoxypropylenediamine 9046-10-0	Not Established	Not Established	Not Established
Benzyl Alcohol 100-51-6	Not Established	Not Established	Not Established
4,4'-Isopropylidenediphenol-Epichlorohydrin Copolymer 25068-38-6	Not Established	Not Established	Not Established
Aluminum Oxide 1344-28-1	TWA: 15 mg/m3 total dust TWA: 5 mg/m3 Respirable fraction	TWA: 1 mg/m3	Not Established
Trade Secret	Not Established	Not Established	Not Established
Silicones and Siloxanes, dimethyl-, reaction products with silica 67762-90-7	PEL: 6 mg/m3	TWA: 10 mg/m3 Inhalable	Not Established

Ventilation: Good general mechanical ventilation and local exhaust is recommended.

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Eye wash must be easily accessible. Wear protective clothing as necessary to prevent contact. When using, do not eat, drink or smoke. Hands and/or face should be washed before breaks and at the end of the shift. Gloves must be inspected regularly and prior to each use. Replace if necessary.

### Personal Protective Equipment:

Wear impervious protective gloves. Wear OSHA, NIOSH approved organic vapor respirator if ventilation is inadequate. Wear appropriate protective eyewear such as splash-proof, chemical resistant safety goggles.

Take off all contaminated clothing immediately. Wash contaminated clothing before reuse.

## Section 9 - Physical and Chemical Properties

This mixture typically exhibits the following properties under normal circumstances:

<b>Appearance:</b> Liquid	<b>Odor:</b> Ammonical
<b>Vapor Pressure:</b> 0.51mm Hg	<b>Odor Threshold:</b> Not Available
<b>Vapor Density:</b> Not Available	<b>pH:</b> Not Available
<b>Density (g/cm<sup>3</sup>):</b> 1.47	<b>Melting Point:</b> Not Available
<b>Freezing Point:</b> Not Available	<b>Solubility:</b> Not Available
<b>Boiling Range:</b> 205°C	<b>Flash Point:</b> 100°C, 212°F
<b>Evaporation Rate:</b> Not Available	<b>Flammability:</b> Not Available
<b>Explosive Limits:</b> Not Available	<b>Partition Coefficient (n-octanol/water):</b> Not Available
<b>Autoignition Temperature:</b> Not Available	<b>Decomposition Temperature:</b> Not Available
<b>Viscosity:</b> Not Available	<b>Grams VOC less water:</b> Nil

## Section 10 – Stability and Reactivity

Stability: STABLE

Components of this mixture are incompatible with the following materials:

Strong Acids  
Strong oxidizers

This mixture is likely to exhibit the following combustion products:

Biphenyls  
Halogenated Compounds  
Carbon Dioxide, Carbon Monoxide  
Nitrogen oxides

Hazardous polymerization will not occur.

## Section 11 - Toxicological Information

### Mixture Toxicity

Inhalation Toxicity LC50: 85mg/L

### Component Toxicity

2855-13-2 Isophorone diamine  
Oral LD50: 1,030 mg/kg (Rat) Dermal LD50: 2,010 mg/kg (Rat) Inhalation LC50: 5 mg/L (Rat)

9046-10-0 Polyoxypropylenediamine  
Oral LD50: 2,885 mg/kg (Rat) Dermal LD50: 2,979 mg/kg (Rabbit) Inhalation LC50: 1 mg/L (Rat)

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100-51-6 Benzyl Alcohol  
Oral LD50: 1,620 mg/kg (Rat) Dermal LD50: 2,010 mg/kg (Rabbit) Inhalation LC50: 4 mg/L (Rat)

67762-90-7 Silicones and Siloxanes, dimethyl-, reaction products with silica  
Dermal LD50: 2,100 mg/kg (Rat)

Routes of Entry:

**Inhalation**      **Skin Contact**      **Eye Contact**      **Ingestion**

Exposure to this material may affect the following organs:

**Lungs**      **Respiratory System**

The following chemicals comprise 0.1% or more of this mixture and are listed and/or classified as carcinogens or potential carcinogens by NTP, IARC, OSHA (mandatory listing), or ACGIH (optional listing):

<u>CAS Number</u>	<u>Description</u>	<u>% Weight</u>	<u>Carcinogen Rating</u>
None	N/A	N/A	N/A

### Section 12 - Ecological Information

#### Component Toxicity

Trade Secret	LC50 4 mg/l fish 96 h; EC50 3.4 mg/l water flea 48h; IC50 7- mg/l bacteria 3h
Hydrous magnesium silicate	LC50 >100 g/l fish
Isophorone diamine	LC50 110 mg/l fish 96h; EC50 >50 mg/l algae 72h; EC10 1,120mg/l bacteria 18h
Polyoxypropylenediamine	EC50 >15 mg/l fish 96h; EC50 418 mg/l water flea 48h; EC50 15 mg/l algae 72h; EC50 750 mg/l bacteria 3h
Benzyl Alcohol	LC50 460 mg/l fish 96 h; EC50 360 ppm water flea 48 h; EC50 640 mg/l algae 96 h; EC10 658 mg/l bacteria 16 h
4,4'-Isopropylidenediphenol-Epichlorohydrin Copolymer	LC50 3.1 mg/l fish 96 h; EC50 1.7 mg/l water flea 48 h; EC50 11 mg/l algae 72 h; LC50 >42.6mg/l bacteria 18h
Trade Secret	LC50 87.6 mg/l fish 96h; EC50 15.2 mg/l water flea 48h; EC50 32.1 algae 72h; EC50 >1000 mg/l Bacteria 30h
Silicones and Siloxanes, dimethyl-, reaction products with silica	LC50 >10,000 mg/l fish 96h; EC50 >1000 water flea 24h

### Section 13 - Disposal Considerations

Waste disposal Methods: Dispose in accordance with Federal, State and Local regulations.

### Section 14 - Transport Information

This material is classified for transport as follows: UN3066, Paint Related Material, N.O.S., 8, III, CORROSIVE (CONTAINS DIETHYLENTRIAMINE 8).

### Section 15 - Regulatory Information

Additional regulatory listings, where applicable

**State of California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65):** WARNING! This product contains the following chemicals which are listed by the State of California as carcinogenic or a reproductive toxin:

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Hydrous magnesium silicate 14807-96-6  
Quartz 14808-60-7  
Titanium Dioxide 13463-67-7

### Materials not included on the Canada DSL inventory:

- None

**Commonwealth of Massachusetts "Right to Know":** This product contains the following toxic or hazardous substances which appear on the Massachusetts Substance List:

Trade Secret  
Aluminum Oxide 1344-28-1  
Benzyl Alcohol 100-51-6  
Hydrous magnesium silicate 14807-96-6  
Quartz 14808-60-7

**NJ "Right to Know":** This product contains the following toxic or hazardous substances which appear on the New Jersey Substance List:

Trade Secret  
Aluminum Oxide 1344-28-1  
4,4'-Isopropylidenediphenol-Epichlorohydrin Copolymer 25068-38-6  
Benzyl Alcohol 100-51-6  
Isophorone diamine 2855-13-2  
Hydrous magnesium silicate 14807-96-6  
Quartz 14808-60-7

**Pennsylvania "Right to Know":** This product contains the following toxic or hazardous substances which appear on the Pennsylvania Substance List:

Trade Secret  
Aluminum Oxide 1344-28-1  
4,4'-Isopropylidenediphenol-Epichlorohydrin Copolymer 25068-38-6  
Benzyl Alcohol 100-51-6  
Isophorone diamine 2855-13-2  
Hydrous magnesium silicate 14807-96-6  
Quartz 14808-60-7

### EPA SARA Title III Section 313 ( 40 CFR 372) components above 'de minimum' level:

Aluminum Oxide 1344-28-1

**Toxic Substances Control Act (TSCA):** All chemicals except those listed below appear in the Toxic Substances Control Act Chemical Substance Inventory:

- None

## Section 16 -Other Information

For further information, please contact the Product Safety director. The information and recommendations contained herein are, to the best of our knowledge and belief, accurate. However, since the conditions of handling and use are beyond our control, we make no guarantee of results, and assume no liability for damages incurred by use of this material. All chemicals may present unknown health hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist. Final determination of suitability of the chemical is the sole responsibility of the user. Users of any chemical should satisfy themselves that the conditions and methods of use assure that the chemical is used safely. No representations or warranties, either expressed or implied of merchantability, fitness for a particular purpose, or any other nature, are made hereunder with respect to the information contained herein, or to the chemical to which the user refers.

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