



# LiquaTile 1186 Hardener

## (Part B)

### Safety Data Sheet (SDS)

#### Section 1 - Product and Company Identification

**Trade Name:** LiquaTile 1186 Hardener (All Versions)

**Product Code:** LiquaTile 1186-012 NU1A Hardener

**Company:**

Wolverine Coatings Corporation  
5969 Highway 221  
Roebuck, SC 29376  
+1 (864) 587-3144

**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:**

Flammable Liquid	4	Flash point $\geq 60^{\circ}\text{C}$ (140°F) and $\leq 93^{\circ}\text{C}$ (200°F)
Skin Corrosive	1A	Destruction of dermal tissue: Exposure < 3 min. Observation < 1 hour, visible necrosis in at least one animal
Eye Corrosive	1	Serious eye damage: Irreversible damage 21 days after exposure, Draize score: Corneal opacity $\geq 3$ , Iritis > 1.5
Respiratory sensitizer	1	Respiratory sensitizer
Skin Sensitizer	1	Skin Sensitizer
Reproductive Toxin	2	Human or animal evidence possibly with other information

**GHS Hazards**

H227	Combustible liquid
H314	Causes severe skin burns and eye damage
H317	May cause an allergic skin reaction
H318	Causes serious eye damage
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled
H361	Suspected of damaging fertility or the unborn child

**GHS Precautions**

P201	Obtain special instructions before use
P202	Do not handle until all safety precautions have been read and understood
P210	Keep away from heat/sparks/open flames/hot surfaces – No smoking
P235	Keep cool
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
P281	Use personal protective equipment as required
P285	In case of inadequate ventilation wear respiratory 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
P304+P341	IF INHALED: If breathing is difficult, 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
P308+P313	IF exposed or concerned: Get medical advice/attention
P333+P313	If skin irritation or a rash occurs: Get medical advice/attention
P342+P311	Call a POISON CENTER or doctor/physician
P370+P378	In case of fire: Use carbon dioxide, alcohol-resistant foam, dry chemical, dry sand, or water fog for extinction
P405	Store locked up
P403+P235	Store in a well ventilated place. Keep cool
P501	Dispose of contents/container in accordance with all local, regional, national, and international regulations.

**Signal Word:** Danger



### Section 3 - Composition / Information on Ingredients

Chemical Name	CAS number	Weight Concentration %
Poly(oxy(methyl-1,2-ethanediyl)), alpha,alpha'-(1,4-cyclohexanediylbis(methylene))bis(omega-(2-aminomethylethoxy)-	1220986-58-2	30.00% - 40.00%
Benzyl Alcohol	100-51-6	20.00% - 30.00%
Quartz	14808-60-7	10.00% - 20.00%
1,4-bis(aminomethyl)cyclohexane	2549-93-1	5.00% - 10.00%
Hydrous magnesium silicate	14807-96-6	1.00% - 5.00%
Polyamine adduct		1.00% - 5.00%
1-(2-Aminoethyl)piperazine	140-31-8	1.00% - 5.00%
Silicones and Siloxanes, dimethyl-, reaction products with silica	67762-90-7	1.00% - 5.00%
Calcium carbonate	1317-65-3	1.00% - 5.00%
Bisphenol A diglycidyl ether resin	25068-38-6	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:** 96 C (205 F)

LEL: 1.00

UEL: 13.00

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

**Unusual Fire and Explosion Hazards:** None

**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.

**Fire Equipment:** No Data

## 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 #	OSHA Exposure Limits	ACGIH Exposure Limits	Other Exposure Limits
Poly(oxy(methyl-1,2-ethanediyl)), alpha,alpha'-(1,4-cyclohexanediylbis(methylene))bis(omega-(2-aminomethylethoxy)-1220986-58-2	Not Established	Not Established	Not Established
Benzyl Alcohol 100-51-6	Not Established	Not Established	Not Established
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
1,4-bis(aminomethyl) cyclohexane 2549-93-1	Not Established	Not Established	Not Established

Hydrous magnesium silicate 14807-96-6	TWA: 20 million particles per ft3	TWA: 2 mg/m3	Not Established
Polyamine adduct	Not Established	Not Established	Not Established
1-(2-Aminoethyl)piperazine 140-31-8	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
Calcium carbonate 1317-65-3	Not Established	Not Established	Not Established
Bisphenol A diglycidyl ether resin 25068-38-6	Not Established	Not Established	Not Established

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

**Hygiene:** 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.

**Contaminated Gear:** 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> Not available
<b>Vapor Pressure:</b> 0.10 mm Hg	<b>Odor threshold:</b> Not available
<b>Vapor Density:</b> Not available	<b>pH:</b> Not available
<b>Density (g/cm3):</b> 1.23	<b>Melting point:</b> Not available
<b>Freezing point:</b> Not available	<b>Solubility:</b> Not available
<b>Boiling range:</b> Not available	<b>Flash point:</b> 96°C, 205°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> Not available

## Section 10 - Stability and Reactivity

**Stability:**

STABLE

**Components of this mixture are incompatible with the following materials:**

- Strong Oxidizers
- Strong Acids
- Alkalies

Strong Bases  
Strong Reducing Agents  
Amines

**This mixture is likely to exhibit the following combustion products:**

Carbon Dioxide, Carbon Monoxide  
Biphenyls  
Nitrogen Oxides  
Smoke

Hazardous polymerization will not occur.

## Section 11 - Toxicological Information

**Mixture Toxicity:**

Inhalation Toxicity LC50: 84mg/L

**Component Toxicity:**

100-51-6	Benzyl Alcohol Oral LD50: 1,620 mg/kg (Rat) Dermal LD50: 2,010 mg/kg (Rabbit) Inhalation LC50: 4 mg/L (Rabbit)
2549-93-1	1,4-bis(aminomethyl)cyclohexane Oral LD50: 530 mg/kg (rat) Dermal LD50: 420 mg/kg (rabbit)
140-31-8	1-(2-Aminoethyl)piperazine Oral LD50: 2,097 mg/kg (rat) Dermal LD50: 866 mg/kg (rabbit)
67762-90-7	Silicones and Siloxanes, dimethyl-, reaction products with silica Dermal LD50: 2,100 mg/kg (Rat)
1317-65-3	Calcium carbonate Oral LD50: 2,000 mg/kg (rat) Dermal LD50: 2,000 mg/kg (rat) Inhalation LC50: 3 mg/L (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>
14808-60-7	Quartz	10 to 20%	Quartz: If product is in liquid or paste form, physical or health hazards listed related to dust are not considered significant. However, product may contain substances that could be potential hazards if caused to become airborne due to grinding, sanding or other abrasive processes.

## Section 12 - Ecological Information

**Component Ecotoxicity:**

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
Quartz	LC50 >10,000 mg/l fish 72h; EC50 7600 mg/L water flea 48h; EC50 440mg/L algae, 72h;
Hydrous magnesium silicate	LC50 >100 g/l fish
1-(2-Aminoethyl)piperazine	LC50 2190 mg/l fish 96h; EC50 58 mg/l water flea 48h; EC50 495 mg/l algae 72h; EC50 511 mg/l bacteria 2h

Silicones and Siloxanes, dimethyl-, LC50 >10,000 mg/l fish 96h; EC50 >1000 mg/l water flea 24h  
reaction products with silica

Bisphenol A diglycidyl ether resin LC50 3.1 mg/l fish 96h; EC50 2.1 mg/l water flea 48h; EC50 >11mg/l Algae  
72h; LC50 >100mg/l bacteria 3h

### 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:

<u>Agency</u>	<u>Proper Shipping Name</u>	<u>UN Number</u>	<u>Packing Group</u>	<u>Hazard Class</u>
DOT	Paint Related Material, Corrosive	3066	III	8
IATA	No Data			
IMDG	No Data			

### 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:

Hydrous magnesium silicate 14807-96-6  
Quartz 14808-60-7

**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:

Calcium carbonate 1317-65-3  
1-(2-Aminoethyl)piperazine 140-31-8  
Hydrous magnesium silicate 14807-96-6  
Quartz 14808-60-7  
Benzyl Alcohol 100-51-6

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

Bisphenol A diglycidyl ether resin 25068-38-6  
Calcium carbonate 1317-65-3  
1-(2-Aminoethyl)piperazine 140-31-8  
Hydrous magnesium silicate 14807-96-6  
1,4-bis(aminomethyl)cyclohexane 2549-93-1  
Quartz 14808-60-7  
Benzyl Alcohol 100-51-6

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

Bisphenol A diglycidyl ether resin 25068-38-6  
Calcium carbonate 1317-65-3  
1-(2-Aminoethyl)piperazine 140-31-8  
Hydrous magnesium silicate 14807-96-6  
1,4-bis(aminomethyl)cyclohexane 2549-93-1  
Quartz 14808-60-7  
Benzyl Alcohol 100-51-6

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

- None

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

- None

**Country**

**Regulation**

**All Components Listed**

**EU Risk Phrases**

**Safety Phrase**

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

- None

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

**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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