

Identification

1

GHS Product Identifier

Ultra-Flex EP990C Part B

Other means of identification

Concrete Penetrating Epoxy Part B Compnent Product. This component is one part of a 2 part product. read and understand the information on the SDS for Part A before using this prodcuct. Mixture, Epoxy Hardner

Recomended use of the chemical and restriction on use

Epoxy Primer for Concrete and Porous Wood Substrates

Supplier's details

Lava-Liner, Ltd. 1550 G Tiburon Blvd. Suite 418 Tiburon, CA 94920 Ph. 415-829-9114 Fax: 415-829-9203 www.lava-liner.com

Emergency phone number

Chemtrec 800-424-9300

2 Hazard(s) identification

Classification of the substance or mixture

Hazardous	
Flammable Liquid	
Skin Corrosion	Category 1B
Serious Eye Damage	Category 1
Skin Sensitization	Category 1

GHS label elements

Danger





Flammable liquid and vapour

Harmful if swallowed or if inhaled

Causes severe skin burns and eye damage

May cause an allergic skin reaction

May cause drowsiness or dizziness

May cause damage to organs through prolonged or repeated exposure if swallowed.

Obtain special instructions before use.

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

Ground and bond container and receiving equipment. Use explosion-proof [electrical/ventilating/lighting/ equipment. Use non-sparking tools. Take action to prevent static discharges. Do not breathe dust/fume/gas/mist/vapours/spray. Wash exposed skin thoroughly after handling. Do not eat, drink or smoke when using this product. Use only outdoors or in a well-ventilated area. Wear protective gloves/protective clothing/eye protection/face protection. IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. IF ON SKIN (or hair): Remove/Take off Immediately all contaminated clothing. Rinse SKIN with water/shower. IF INHALED: Remove person to fresh air and keep comfortable for breathing. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a POISON CENTER/doctor/physician if you feel unwell. Wash contaminated clothing before reuse. Store in a well-ventilated place. Keep container tightly closed. Store in a well-ventilated place. Keep cool.

Store locked up.

3

Dispose of contents/container to licensed landfill in accordance with local and national regulations.

Composition/information on ingredients

Description	CAS Number	EINECS Number	%	Note
Butyl Acetate	123-86-4	204-658-1	10 - 1	5 TLV 150ppm / PEL 150pppm (US CA OEL)
Xylene,	1330-20-7	215-535-7	20 - 3	0 TLV 100ppm / PEL 100ppm
Nonylphenol	84852-15-3		10 - 1	5 Workplace Exposure Limits Not Established
Benzyl Alcohol	100-51-6		22 - 2	5 Workplace Exposure Limits Not Established
Amine Curing Agent			35 - 4	5 Proprietary

4 First-aid measures

Description of necessary first-aid measures

Eyes

Check for and remoce any contact lenses. Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical attention immediaetly.

Skin

Remove contaminated clothing. Wash exposed area with soap and water. If symptoms persist, seek medical attention. Launder clothing before reuse.

Ingestion

Seek medical attention. If individual is drowsy or unconscious, do not give anything by mouth; place individual on the left side with the head down. Contact a physician, medical facility, or poison control center for advice about whether to induce vomiting. If possible, do not leave individual unattended.

Inhalation

May cause dizziness and/or drowsiness.

If symptoms develop, immediately move individual away from exposure and into fresh air. Seek immediate medical attention; keep person warm and quiet. If person is not breathing, begin artificial respiration. If breathing is difficult, administer oxygen. **Notes to physician**

Hazards: Inhalation of high concentrations of this material, as could occur in enclosed spaces or during deliberate abuse, may be associated with cardiac arrhythmias. Sympathomimetic drugs may initiate cardiac arrhythmias in persons exposed to this material. This material is an aspiration hazard. Potential danger from aspiration must be weighed against possible oral toxicity (See Section 2 - Swallowing) when deciding whether to induce vomiting.

Treatment: No information available.

Most important symptoms/effects, acute and delayed

Signs and symptoms of exposure to this material through breathing, swallowing, and/or passage of the material through the skin may include: stomach or intestinal upset (nausea, vomiting, diarrhea), irritation (nose, throat, airways), runny nose, cough, allergic skin reaction (delayed skin rash which may be followed by blistering, scaling and other skin effects), numbness, central nervous system depression (dizziness, drowsiness, weakness, fatigue, nausea, headache, unconsciousness), abdominal pain, effects on breathing rate, narcosis (dazed or sluggish feeling), convulsions, respiratory failure. May cause blurred vision.

Indication of immediate medical attention and special treatment needed, if necessary

Aggravated Medical Condition

Preexisting disorders of the following organs (or organ systems) may be aggravated by exposure to this material; upper respiratory tract, Skin, lung (for example, asthma-like conditions).

Target Organs

Overexposure to this material (or its components) has been suggested as a cause of the following effects in laboratory animals: respiratory tract damage (nose, throat, and airways), lung damage, anemia, kidney damage, lung damage.

Overexposure to this material (or its components) has been suggested as a cause of the following effects in humans: anemia, effects on hearing.

Carcinogenicity

There is no information available. The chance of this material causing cancer is unknown. This material is not listed as a carcinogen by the International Agency for Research on Cancer (IARC), the National Toxicology Program (NTP), or the Occupational Safety and Health Administration (OSHA).

Reproductive hazard

This material (or a component) has been shown to cause harm to the fetus in laboratory animal studies. The relevance of these findings to humans is uncertain.

Note to Physicians: There is no specific antidote. Treatment of overexposure should be directed at the control of symptoms and the clinical condition.

5 Fire-fighting measures

Suitable extinguishing media

Apply alcohol-resistant or all-purpose-type foams. For large fires; carbon dioxide or dry chemical media for small fires. CO₂, Dry Chemical, Foam, Halon or waer spray (fog).

Specific hazards arising from the chemical

Vapors form from this product and may travel or be moved by air currents and ignited by pilot lights, other flames, smoking, sparks, heaters, electrical equipment, static discharges, or other ignition sources at locations distant form handling point. Containers exposed to intense heat from fires should be cooled with water to prevent vapor pressure buildup which could result in container rupture, Container areas exposed to direct flame contact should be cooled with large quantities of water as needed to prevent weakening of container structure.

Special protective actions for fire-fighters

Flash Point:	27°C (80°F)
Flammability Limits:	
Lower Limit:	No Data
Upper Limit	No Data
Autoignition Temperature:	432°C (810°F)
Pressure-demand, self-contained breathing apparatus should be provided for fire fighters in buildings or confined spaces where this	

product is stored. Storage containers when exposed to heat can build excessive pressure and burst with explosive force. Storage containers exposed to fire should be kept cool with water spray in order to prevent pressure buildup.

6 Accidental release measures

Personal precautions, protective equipment and emergency procedures

This is a flammable material. Eliminate all ignition sources. Handling equipment must be grounded to prevent sparking. Large spills: evacuate the area of unprotected personnel. Wear appropriate respirator and protective clothing. Shut off source of leak only if safe to do so. Dike and contain. If vapor clouds forms, water fog may be used to suppress; contain run-off, remove with vacuum trucks or pump to storage/salvage vessels. Soak up residue with an absorbent such as clay, sand or other suitable material; place in non-leaking containers for proper disposal, flush area with water to remove trace residue. Dispose of flush solutions as above. For small spills: take up with an absorbent material and place in non-leaking containers; seal tightly for proper disposal.

Environmental precautions

Prevent run-off to sewers, streams or other bodies of water. If run-off occurs, notify proper authorities as required, that a spill has occurred.

Methods and materials for containment and cleaning up

Absorb liquid on vermiculite, floor absorbent or other absorbent material. Contained material should be cleaned up and removed to an approved waste disposal facility. Spills or releases should be reported, if required to the appropriate local, state, and federal authority.

7 Handling and storage

Precautions for safe handling

Observe all label precautions. Use appropriate personal protective equipment (see section 8). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Do not get in eyes or on skin or clothing. Do not ingest. Avoid breathing vapor or mist. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use non-sparking tools. Take precautionary measures against electrostatic discharges. To avoid fire or explosion, dissipate static electricity during transfer by grounding and bonding containers and equipment before transferring material. Empty containers retain product residue and can be hazardous. Do not reuse container.

Conditions for safe storage, including any incompatibilities

Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see section 10) and food and drink. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

8 Exposure controls/personal protection

Control parameters

Component	Limits	Method
Butyl Acetate	150 ppm TWA	NIOSH, ACGIH, OSHA
Xylene	100 ppm TWA	NIOSH, ACGIH, OSHA
Amine Curing Agent	10 ppm TWA	WEEL
Nonylphenol	No Data Available	
Benzyl Alcohol	No Data Available	

Appropriate engineering controls

Ventilation and engineering controls to protect workers and ventilate work area to, at or below recommended employee exposure levels. Technical measures are preferred over use of personal protective equipment. Environmental controls, such as scrubber or thermal oxidizer may be required to prevent process releases to the atmosphere. Do not empty into drains—risk of explosion.

Individual protection measures

Respiratory Protection: Self-contained breathing apparatus in high concentrations. For emergencies or instances where the exposure levels are not known, use a full-face piece, positive-pressure, air-supplied respirator. Warning: Air purifying respirators do not protect workers in oxygen-deficient atmospheres.

Protective Clothing: Avoid prolonged or repeated contact with skin. Wear chemical-resistant gloves and other clothing as required to minimize contact. Test data from published literature and/or glove and clothing manufacturers indicate the best protection is provided by nitrile, neoprene and natural rubber gloves.

Eye Protection: Avoid contact with eyes. Wear chemical goggles if there is likelihood of contact with eyes. Maintain eye wash fountain and quick-drench facilities in work area.

Other Protective Clothing or Equipment: Use explosion-proof ventilation as required to control vapor concentrations. Eye wash fountains and safety showers should be available for emergency use.

9 Physical and chemical properties

Physical and chemical properties

Appearance/Odor:	Colorless liquid; kerosene like smell
Physical Sate:	Liquid
pH:	Alkaline
Melting Point:	-88.3°C (-127°F)
Vapor Pressure (mmHg):	44 @ 25°C (77°F)
Vapor Density (Air=1):	<1
Boiling Point:	138°C (280°F)
Solubility in Water:	slightly soluble
Specific Gravity (Water=1):	0.97
VOC:	<340 g/l when mixed with Part B

10 Stability and reactivity

Reactivity

Heating may cause fire.

Chemical stability

Stable under prescribed storage conditions.

Possibility of hazardous reactions

Not Known

Conditions to avoid

Avoid heat, sparks, flames and other sources of ignition.

Incompatible materials

Concentrated nitric and sulfuric acids, strong oxidizers, aldehydes, and halogen compounds. Do Not Store or handle in aluminum equipment at temperatures above 120°F. Keep away from heat, flame, acetaldehyde, chlorine, ethylene oxide, hydrogen-palladium combination, hydrogen peroxide-sulfuric acid combination, potassium tert-butoxide, hypochlorous acid, isocyanates, nitroform, phosgene, oleum and perchloric acid.

Hazardous decomposition products

Burning may produce carbon oxides and unidentified organic compounds may be formed during combustion..

Toxicological (health) effects

Component: Xylene CAS# 1330-20-7 LD50/LC50: Draize test, rabbit, eye: 87 mg Mild; Draize test, rabbit, eye: 5 mg/24H Severe; Draize test, rabbit, skin: 100% Moderate; Draize test, rabbit, skin: 500 mg/24H Moderate; Inhalation, rat: LC50 = 5000 ppm/4H; Oral, mouse: LD50 = 2119 mg/kg; Oral, rat: LD50 = 4300 mg/kg; Skin, rabbit: LD50 = >1700 mg/kg;<BR. Carcinogenicity: CAS# 1330-20-7: ACGIH: A4 - Not Classifiable as a Human Carcinogen

IARC: Group 3 carcinogen

Epidemiology: No information available.

Teratogenicity: No information available.

Reproductive Effects: There is ample evidence that xylene produces embryotoxicity (reduced body weight, retarded ossification, retarded kidney development, increased extra rib) and fetotoxicity in mice and rats, but xylene is not considered teratogenic. **Neurotoxicity:** No information available.

Mutagenicity: No information available.

Other Studies: Standard Draize Test: Administration into the eye (rabbit) = 5 mg/24H (Severe). Standard Draize Test: Administrat ion onto the skin (rabbit) = 500 mg (Moderate).

Component: n-Butyl Acetate

CAS # 123-86-4

Oral rat LD50: 10.8 g/kg;

inhalation rat LC50: 390 ppm/4H

Skin rabbit LD50: >17,600 mg/kg;

Irritant, skin rabbit (Std. Draize): 500 mg/24H, moderate. Irritant, eye rabbit: 100 mg moderate. Investigated as a reproductive effector.

Reproductive Toxicity:

Has shown teratogenic effects in laboratory animals.

Component: Benzyl alcohol

CAS # 100-51-6 Inhalation rat: LC50 1000ppm/8H Skin rabbit: LD 50 2,000 mg/kg Benzyl alcohol LC50 (96 h) : 10 mg/l Species : Bluegill sunfish (Lepomismacrochirus). Benzyl alcohol LC50 (96 h) : 460 mg/l Species : Fathead minnow (Pimephalespromelas).

Component: Amine Curing Agent

CAS # Proprietary Oral rat: LD50 > 2,000 mg/kg Dermal rabbit LD50 > 2,110 mg/kg

Component: Nonylphenol

CAS # 84852-15-3 LD50 Oral - Rat - male and female - 1,412 mg/kg Skin corrosion/irritation Skin - Rabbit Result: Causes burns. - 4 h (OECD Test Guideline 404) Eyes - Rabbit Result: Corrosive - 72 h (OECD Test Guideline 405)

Information on the likely routes of exposure

Inhalation In high concentrations, vapours are narcotic and may cause headache, fatigue, dizziness and nausea. Icke klassificerad som aspirationstoxisk (Not classified as asp. tox.)

Skin contact Prolonged or frequent contact may cause redness, itching, eczema and skin cracking. Defats the skin. **Eve contact** May irritate and cause redness and pain.

Ingestion Ingestion of large amounts may cause unconsciousness. However, ingestion may cause nausea, headache, dizziness and intoxication. Ingestion may cause irritation of the gastrointestinal tract, vomiting and diarrhoea. May cause irritation to the mouth and throat.

12 Ecological information

Toxicity

Lava-Liner, Ltd. has not conducted ecological studies on this product and no information on similar mixtures was found in a search of scientific literature. Component Properties are listed below:

ComponentXyleneAcute aquatic, fish Value: 2 mg/lMethod of testing: LC50Fish, species: Roccus saxatilisDuration: 96hAcute aquatic, algae Value: > 3,2 mg/lMethod of testing: IC50Algae, species: Selenastrum CapricornumDuration: 72hAcute aquatic, Daphnia Value: 8,5 mg/lMethod of testing: EC50Daphnia, species: Daphnia magnaDuration: 48h

Component Benzyl Alcohol 48hr EC50 (Daphnia magna): 230 mg/L

Component: Amine Curing Agent

LC0 (96 h) : 46 mg/l Species : Golden orfe (Leuciscus idus). LC50 (96 h) : > 100 mg/l Species : Golden orfe (Leuciscus idus). EC50 (48 h) : 6.84 mg/l Species : Daphnia magna. Toxicity to algae EC50 (72 h) : 140 - 200 mg/l Species : Algae.

Component: Nonylphenol

LC50 - Lepomis macrochirus - 0.209 mg/l - 96 h Toxicity to daphnia and other aquatic invertebrates semi-static test EC50 - Daphnia magna (Water flea) - 0.0844 mg/l - 48 h Toxicity to algae static test EC50 - Selenastrum capricornutum (green algae) - 0.33 mg/l - 72 h

Persistence and degradability

Component Xylene Lättnedbrytbar av biologiska organismer.

Bioaccumulative potential

Component: Nonylphenol Pimephales promelas (fathead minnow) - 28 d

Mobility in soil

The product is partially insoluble in water and will spread on the water surface.

13 Disposal considerations

Disposal methods

Recover or reclaim when practical. Absorb liquid and place in airtight containers. This product will vaporize rapidly under ambient conditions. Keep away from any ignition sources, open flame, sparks, smoking or other activity that might create static electricity discharge. Dispose of in an approved landfill if allowed locally. Comply with all Federal, State and local regulations. Dispose of in a permitted waste management facility if incineration or landfill is not practical. The generation of waste should be avoided or minimized wherever possible. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe way.

14 Transport information

UN Number

UN 1263

UN Proper Shipping Name

Paint, FlammableLiquid

Transport hazard class(es)

3, Flammable Liquid DOT Class 60

Packing group, if applicable

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Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Xylene 100 lb (45.4kg) (Applicable to shipments of more than 50 Gallons of Blended Epoxy Part B) Butyl Alcohol 5000 lb (2272.7 kg)

15 Regulatory information

Safety, health and environmental regulations specific for the product in question

U.S. Regulations:

TSCA Inventory:

All components of this product are listed or exempt under the Toxic Substances Control Act (TSCA) inventory. One component, nonylphenol, (CAS# 84852-15-3) requires export notification under the Toxic Substances Control Act -TSCA 12(b).

SARA 302/304:	N/A
SARA 311/312:	Fire, Immediate
SARA 313: requirements. INGREDIENT NAME Xylene Butyl Alcohol	The following ingredients are SARA 313 "Toxic Chemicals" and may be subject to annual reporting CAS 1330-20-7 84852-15-3
Butyl Alcohol	84852-15-3

NTP: No IARC Monograph: No OSHA Regulated: Yes

STATE REGULATIONS

PROPOSITION 65 SUBSTANCES (component(s) known to the State of California to cause cancer and/or reproductive toxicity and subject to warning and discharge requirements under the "Safe Drinking Water and Toxic Enforcement Act of 1986")

16 Other information

Other information

Some of the information presented and conclusions drawn herein are from sources other than direct test data on the product itself. The information in this SDS was obtained from sources which we believe are reliable. However, the information is provided without any warranty, express or implied, regarding its correctness. The conditions or methods of handling, storage, use and disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product. If the product is used as a component in another product other than that provided by Lava-Liner, Ltd. this SDS information may not be applicable. This SDS has been prepared in accordance with the requirements of the OSHA Hazard Communication Standard (29 CFR 1910.1200).