1 Identification of the substance/mixture and the company/undertaking

1.1 Product identifier
Trade name: EPOGROUT 758 Hardener
Article number: EPOGROUT 758 Hardener

1.2 Application of the substance / the mixture: Epoxy grout

1.3 Details of the supplier of the Safety Data Sheet
Manufacturer/Supplier:

L & M Construction Chemicals, Inc.
14851 Calhoun Road
Omaha, NE 68152
Phone: (402) 453-6600

1.4 Emergency telephone number:
ChemTel Inc.
(800) 255-3924, +1 (813) 248-0585

2 Hazards identification

2.1 GHS Classification of the substance or mixture
Acute Toxicity – Oral; Category 4
Acute Toxicity – Dermal; Category 4
Skin Corrosion; Category 1B
Serious Eye Damage; Category 1
Skin Sensitization; Category 1
Reproductive Toxicity; Category 2
Specific Target Organ Toxicity – single exposure; Category 3
Aquatic Hazard (Acute) – Category 3

2.2 GHS Label elements

Hazard pictograms/symbols

Signal word: Danger

Hazard statements:
H302+H312: Harmful if swallowed or in contact with skin.
H314: Causes severe skin burns and eye damage.
H317: May cause an allergic skin reaction.
H318: Causes serious eye damage.
H335: May cause respiratory irritation.
H361: Suspected of damaging fertility or the unborn child.
H402: Harmful to aquatic life.

Precautionary statements:
P201: Obtain special instructions before use.
P260: Do not breathe dust/fume/gas/mist/vapours/spray.
P264: Wash hands thoroughly after handling.
P271: Use only outdoors or in a well-ventilated area.
P280: Wear protective gloves/protective clothing/eye protection/face protection.
P281: Use personal protective equipment as required.
P301+P330+P331: IF SWALLOWED: rinse mouth. Do NOT induce vomiting.
P304+340: IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310: Immediately call a POISON CENTRE or doctor/physician.
P403+P233: Store in a well-ventilated place. Keep container tightly closed.

Additional information:
This product contains a component that is toxic by inhalation when aerosolized or sprayed. Please refer to Sections 11 for toxicity information. If product is not being aerosolized or sprayed, the inhalation toxicity may not be applicable.

HMIS Rating:
Health: 3
Flammability: 1
Physical Hazard: 0

3 Composition/information on ingredients

3.2 Mixture
Description: Mixture of substances listed below with potential nonhazardous additions.

<table>
<thead>
<tr>
<th>Dangerous components</th>
<th>CAS:</th>
<th>Description</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teta, reaction products with propylene oxide</td>
<td>26950-63-0</td>
<td>40-60%</td>
<td></td>
</tr>
<tr>
<td>Triethylenetetramine</td>
<td>112-24-3</td>
<td>10-25%</td>
<td></td>
</tr>
<tr>
<td>Diethylenetriamine</td>
<td>111-40-0</td>
<td>10-25%</td>
<td></td>
</tr>
<tr>
<td>Phenol, 4,4'-(1-methylene)bis-</td>
<td>80-05-7</td>
<td>5-15%</td>
<td></td>
</tr>
<tr>
<td>Polyoxypropylenediamine</td>
<td>9046-10-0</td>
<td>5-10%</td>
<td></td>
</tr>
</tbody>
</table>

4 First aid measures

4.1 Description of first aid measures
General information:
Seek medical advice. If breathing has stopped or is labored, give assisted respirations. Supplemental oxygen may be indicated. If the heart has stopped, trained personnel should begin cardiopulmonary resuscitation immediately.

After inhalation: Supply fresh air; consult doctor in case of complaints.

After skin contact:
Immediately remove contaminated clothing, and any extraneous chemical, if possible to do so without delay. Take off contaminated clothing and shoes immediately.

**After eye contact:**
Rinse immediately with plenty of water for at least 15 minutes. If symptoms persist, consult a doctor.

**After ingestion:**
Never give anything by mouth to an unconscious person. Prevent aspiration of vomit. Turn victim's head to the side. Do not induce vomiting; call for medical help immediately.

4.2 Most important symptoms and effects, both acute and delayed:
Repeated and/or prolonged exposures to low concentrations of vapors or aerosols may cause: sore throat, asthma, eye disease, kidney disorders, liver disorders, skin disorders and allergies.

4.3 Indication of any immediate medical attention and special treatment needed:
Contains Phenol, 4,4’-(1-methylethylidene)bis-. May cause an allergic reaction.

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5.1 Extinguishing media
**Suitable extinguishing agents:**
Foam.
Fire-extinguishing powder.
Carbon dioxide.

5.2 Specific hazards arising from the substance or mixture:

5.3 Advice for the firefighters
**Protective equipment:**
Wear self-contained respiratory protective device.
Wear fully protective suit.

**Additional information:**
Cool endangered receptacles with water fog or haze.
Eliminate all ignition sources if safe to do so.

---

6.1 Personal precautions, protective equipment and emergency procedures:
Use respiratory protective device against the effects of fumes/dust/aerosol.
Wear protective equipment. Keep unprotected persons away.
Ensure adequate ventilation.
Keep away from ignition sources.

6.2 Environmental precautions:
Do not allow to enter sewers/surface or ground water.
Inform respective authorities in case of seepage into water course or sewage system.
Prevent from spreading (e.g. by damming–in or oil barriers).

6.3 Methods and material for containment and cleaning up:
Send for recovery or disposal in suitable receptacles.
Dispose contaminated material as waste according to item 13.
Ensure adequate ventilation.

---

7.1 Precautions for safe handling:
Use only in well-ventilated areas.
Store in cool, dry place in tightly closed receptacles (60-80°F recommended).
7.2 Conditions for safe storage, including any incompatibilities:
Use only receptacles specifically permitted for this substance/product. Avoid storage near extreme heat, ignition sources or open flame.
Further Information about storage conditions:
Keep container tightly sealed.
Store in an area with adequate ventilation.

8 Exposure controls/personal protection

8.1 Control parameters
Exposure Limits:

<table>
<thead>
<tr>
<th>Substance</th>
<th>Exposure Limit (TWA)</th>
<th>Time</th>
<th>Limit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Triethylenetetramine</td>
<td>Time Weighted Average (TWA): WEEL</td>
<td>1 ppm</td>
<td>6 mg/m³</td>
</tr>
<tr>
<td>Diethylenetriamine</td>
<td>Time Weighted Average (TWA): ACGIH</td>
<td>1 ppm</td>
<td>---------</td>
</tr>
<tr>
<td>Diethylenetriamine</td>
<td>Recommended Exposure Limit (REL): NIOSH</td>
<td>1 ppm</td>
<td>4 mg/m³</td>
</tr>
<tr>
<td>Diethylenetriamine</td>
<td>Time Weighted Average (TWA): OSHA Z1A</td>
<td>1 ppm</td>
<td>4 mg/m³</td>
</tr>
<tr>
<td>Diethylenetriamine</td>
<td>Time Weighted Average (TWA): Permissible Exposure Limit (PEL): US CA OEL</td>
<td>1 ppm</td>
<td>4 mg/m³</td>
</tr>
<tr>
<td>Diethylenetriamine</td>
<td>Time Weighted Average (TWA): TN OEL</td>
<td>1 ppm</td>
<td>4 mg/m³</td>
</tr>
</tbody>
</table>

8.2 Engineering controls
Provide readily accessible eye wash stations and safety showers. Provide ventilation adequate to ensure concentrations are minimized.

8.3 Personal protective equipment
General protective and hygienic measures:
Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing.
Wash hands before breaks and at the end of work.
Do not inhale gases / fumes / aerosols.
Avoid contact with the eyes and skin.

Respiratory protection:
Not required under normal conditions of use.
Use suitable respiratory protective device in case of insufficient ventilation.
For spills, respiratory protection may be advisable.
Use respiratory protection when grinding or cutting material.

Hand protection:
Protective, impervious gloves. (Neoprene, Butyl-rubber, Nitrile rubber)
The glove material has to be impermeable and resistant to the product / the substance/ the preparation. Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation.

Eye protection:
Face shield with safety glasses or goggles underneath.
Contact lenses should not be worn.

Skin and Body protection:
Protective work clothing.
Where potential exposure warrants, rubber or plastic boots and chemically resistant protective suit.
9 Physical and chemical properties

9.1 Information on basic physical and chemical properties
General Information
Appearance
Form: Liquid
Colour: Blue
Odour: Amine
Odour threshold: No data available
pH: Alkaline
Melting point/range: No data available
Boiling point/range: >392 °F / >200 °C
Flash point: >212 °F / >100 °C
Evaporation rate: No data available
Flammability (solid, gaseous): Not applicable
Upper/lower flammability or explosive limit: Not applicable
Vapor pressure: No data available
Vapor density: No data available
Relative Density at 20°C: 1.00 g/cm³
Solubility in / Miscibility with
Water: Not miscible or difficult to mix.
Partition coefficient (n-octanol/water): No data available
Auto/Self-ignition temperature: No data available
Decomposition temperature: No data available
Viscosity: 200 – 400 cps

10 Stability and reactivity

10.1 Reactivity
10.2 Chemical stability
Thermal decomposition / conditions to be avoided:
No decomposition if used and stored according to specifications.
10.3 Possibility of hazardous reactions:
Reacts with strong alkali.
Exothermic polymerization.
Reacts with strong acids and oxidizing agents.
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Reacts with catalysts.

10.4 Conditions to avoid:
Avoid contact with strong oxidizing agents, excessive heat or flames.

10.5 Incompatible materials:
Strong acids, bases and oxidizing agents.

10.6 Hazardous decomposition products:
Nitric acid, Ammonia, Nitrogen oxides (NOx), Nitrogen oxide can react with water vapors to form corrosive nitric acid, Carbon monoxide, Carbon dioxide (CO2), Aldehydes, Flammable hydrocarbon fragments.

11 Toxicological information

11.1 Information on likely routes of exposure:
Skin contact: Harmful in contact with skin. Causes skin burns.
Eye contact: Causes eye burns.
Ingestion: Harmful if swallowed. If ingested, severe burns of the mouth and throat, as well as a danger of perforation of the esophagus and the stomach.
Inhalation: This product contains a component that is toxic by inhalation when aerosolized or sprayed. If product is not being aerosolized or sprayed, the inhalation toxicity may not be applicable. Inhalation of vapors and/or aerosols in high concentration may cause irritation of respiratory system. Inhalation of aerosol may cause irritation to the upper respiratory tract. May cause nose, throat, and lung irritation. Can cause severe eye, skin and respiratory tract burns.

11.2 Symptoms related to physical, chemical and toxicological characteristics:
Repeated and/or prolonged exposures to low concentrations of vapors or aerosols may cause: sore throat, asthma, eye disease, kidney disorders, liver disorders, skin disorders and allergies.

11.3 Delayed and immediate effects as well as chronic effects from short and long-term exposure:
This product contains no listed carcinogens according to IARC, ACGIH, NTP and/or OSHA in concentrations of 0.1 percent or greater. May cause allergic skin reaction. This product may cause adverse reproductive effects. Asthma, Eye disease, Kidney disorders, Liver disorders, Skin disorders and Allergies.

11.4 Numerical measures of toxicity: No data is available for full mixture.

<table>
<thead>
<tr>
<th>Substance</th>
<th>CAS Number</th>
<th>Oral LD50</th>
<th>Dermal LD50</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diethylenetriamine</td>
<td>CAS 111-40-0</td>
<td>1080 mg/kg (rat)</td>
<td></td>
</tr>
<tr>
<td>Phenol, 4,4’-(1-methylethylidene)bis-</td>
<td>CAS 80-05-7</td>
<td>3250 mg/kg (rat)</td>
<td></td>
</tr>
<tr>
<td>Polyoxypropylenediamine</td>
<td>CAS 9046-10-0</td>
<td>&gt;2800 mg/kg (rat)</td>
<td></td>
</tr>
</tbody>
</table>

12 Ecological information

12.1 Aquatic toxicity: No data available on the product itself.
12.2 Persistence and degradability: No data available on the product itself.
12.3 Bioaccumulative potential: No data available on the product itself.
12.4 Mobility in soil: No data available.
12.5 Other adverse effects: No further relevant information available
13 Disposal considerations

13.1 Waste treatment methods
Waste from residue/unused product:
This product should not be allowed to enter drains, water courses or the soil. Dispose of this material in a safe manner and in accordance with federal, state and local regulations.

Contaminated packaging:
Disposal must be made in accordance with official federal, state and local regulations.

14 Transport information

DOT
- UN number: UN2735
- Proper Shipping Name: AMINES, LIQUID, CORROSIVE, N.O.S. (Diethylenetriamine, Polyoxypropylenediamine)
- Hazard Class: 8
- Packing Group: II
- Labels(s): 8
- Marine Pollutant: No

IATA
- UN number: UN2735
- Proper Shipping Name: AMINES, LIQUID, CORROSIVE, N.O.S. (Diethylenetriamine, Polyoxypropylenediamine)
- Hazard Class: 8
- Packing Group: II
- Labels(s): 8
- Marine Pollutant: No

IMDG
- UN number: UN2735
- Proper Shipping Name: AMINES, LIQUID, CORROSIVE, N.O.S. (Diethylenetriamine, Polyoxypropylenediamine)
- Hazard Class: 8
- Packing Group: II
- Labels(s): 8
- Marine Pollutant: No

TDG
- UN number: UN2735
- Proper Shipping Name: AMINES, LIQUID, CORROSIVE, N.O.S. (Diethylenetriamine, Polyoxypropylenediamine)
- Hazard Class: 8
- Packing Group: II
- Labels(s): 8
- Marine Pollutant: No

15 Regulatory Information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

Toxic Substance Control Act (TSCA) 12(b) Component(s): None.

<table>
<thead>
<tr>
<th>Country</th>
<th>Regulatory list</th>
<th>Notification</th>
</tr>
</thead>
<tbody>
<tr>
<td>USA</td>
<td>TSCA</td>
<td>Included on Inventory.</td>
</tr>
<tr>
<td>EU</td>
<td>EINECS</td>
<td>Included on EINECS inventory or polymer substance, monomers included on EINECS inventory or</td>
</tr>
</tbody>
</table>
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<table>
<thead>
<tr>
<th></th>
<th>no longer polymer.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Canada</td>
<td>DSL</td>
</tr>
<tr>
<td>Australia</td>
<td>AICS</td>
</tr>
<tr>
<td>Japan</td>
<td>ENCS</td>
</tr>
<tr>
<td>South Korea</td>
<td>ECL</td>
</tr>
<tr>
<td>China</td>
<td>SEPA</td>
</tr>
<tr>
<td>Philippines</td>
<td>PICCS</td>
</tr>
</tbody>
</table>

Included on Inventory.

SARA

**Section 355 (extremely hazardous substances):**
None of the ingredients is listed.

**Section 313 (Specific toxic chemical listings):**
Component(s) above ‘de minimus’ level: Phenol, 4,4’-(1-methylethylidene)bis-

**TSCA (Toxic Substances Control Act):**
All the ingredients are listed.

Proposition 65 (California):

**Chemicals known to cause cancer:** None

15.2 Chemical Safety assessment: A Chemical Safety Assessment has not been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

Abbreviation and acronyms:
ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road
IMDG: International Maritime Code for Dangerous Goods
DOT: US Department of Transportation
IATA: International Air Transport Association
GHS: Globally Harmonized System of Classification and Labeling of Chemicals
ACGIH: American Conference of Governmental Industrial Hygienist.
EINECS: European Inventory of Existing Commercial Chemical Substances
ELINCS: European List of Notified Chemical Substance
CAS: Chemical Abstracts Service (division of the American Chemical Society)
HMIS: Hazardous Materials Identification System (USA)
WHMIS: Workplace Hazardous Materials Information System (Canada)