Dura-Plate 100 Epoxy Mortar

QUESTIONS OR TO ORDER CONTACT:
A•LOK PRODUCTS INC. 697 MAIN STREET TULLYTOWN, PA. 215-547-3366 OR 1-800-822-2565

T E C H N I C A L  D A T A  S H E E T

Description:
Dura-Plate 100 Epoxy Mortar provides concrete and masonry surfaces with increased chemical and abrasion resistance. The three-part, resin aggregate system forms a trowelable epoxy mortar that applies easily to overhead and vertical concrete surfaces.

When cured, Dura-Plate 100 Epoxy Mortar forms a high strength protective coating for sanitary sewer lift stations, manholes, and other structures. It is impermeable to water, and resistant to attack by hydrogen sulfide and acid generated by microbiological sources.

Product Benefits:
- Easy application requires no primer
- Non-sagging mortar for vertical and overhead application
- Excellent concrete adhesion, both at application, and after curing
- Provides waterproof barrier
- Excellent resistance to hydrogen sulfide and sulfuric acid
- 100% solid, no VOC

Packaging & Coverage:

5 gallon pail kit (25 ft² at 1/8" thickness) containing:
- Resin Part A: 1 gallon can
- Hardener Part B: ½ gallon can
- Filler Part C: 20 lb.
- Sika Color Pack

3 gallon pail kit (12.5 ft² at 1/8" thickness) containing:
- Resin Part A: ½ gallon can
- Hardener Part B: ¼ gallon can
- Filler Part C: 10 lb
- Sika Color Pack

Technical Data:
Dura-Plate 100 Epoxy Mortar cures to form a solid, durable seal.

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pot Life</td>
<td>2 hr. @ 70° F</td>
</tr>
<tr>
<td>Peak Exotherm @ 70º F</td>
<td>&lt; 100º F</td>
</tr>
<tr>
<td>Cure time @ 70º F</td>
<td></td>
</tr>
<tr>
<td>Initial set</td>
<td>4 hrs.</td>
</tr>
<tr>
<td>90% strength</td>
<td>7 days</td>
</tr>
<tr>
<td>Final strength</td>
<td>14 days</td>
</tr>
<tr>
<td>Maximum Service Temperature</td>
<td>165°F</td>
</tr>
<tr>
<td>Minimum Application Temperature</td>
<td>45°F</td>
</tr>
</tbody>
</table>

Chemical Resistance:
Dura-Plate 100 Epoxy Mortar was tested for chemical resistance by immersing cured samples in 20% sulfuric acid at 70°F for 112 days.

<table>
<thead>
<tr>
<th>Chemical</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>20% sulfuric acid 112 days immersion</td>
<td>Resistant*</td>
</tr>
</tbody>
</table>

*No changes in mass or appearance of test specimen after immersion.

Component Physical Properties:
Dura-Plate 100 Epoxy Mortar is a 3-part thixotropic system packaged in a pail kit with a Sika Color Pack.

<table>
<thead>
<tr>
<th>Property</th>
<th>Resin Part A</th>
<th>Hardener Part B</th>
</tr>
</thead>
<tbody>
<tr>
<td>Color</td>
<td>White</td>
<td>Tan</td>
</tr>
<tr>
<td>Form</td>
<td>Paste 100,000 cps</td>
<td>Liquid 20,000 cps</td>
</tr>
<tr>
<td>Odor</td>
<td>No Odor</td>
<td>Slight ammonia</td>
</tr>
<tr>
<td>Specific Gravity</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(water = 1)</td>
<td>1.2</td>
<td>1.05</td>
</tr>
</tbody>
</table>

Part C is a especially formulated silica filler.
Safety:
Dura-Plate 100 Epoxy Mortar has a low level of toxicity. Good industrial hygiene practice and appropriate precautions should be employed during use. Avoid personal contact with the product. See MSDS for specific details.

Storage and Handling:
Keep cans tightly closed in a cool, dark, dry location. All cans should be disposed of in an environmentally safe manner and in accordance with governmental regulations. Unopened product has a shelf life of two years.

Application:

Surface Preparation: Surfaces should be clean, structurally sound, and fully cured for 28 days. Remove any loose material. Be sure that surfaces are free of oil, grease, paint, rust, asphalt, and other contaminants. Surfaces may be cleaned with detergents followed by thorough rinsing with water. Best results are seen when new concrete is abraded by abrasive blast, high-pressure water blast, or acid etch to obtain uniform surface texture. Dura-Plate 100 Epoxy Mortar may be applied to clean surfaces that are dry or are slightly damp.

Mixing: Dura-Plate 100 Epoxy Mortar is packaged in factory pre-measured kits. To mix, pour the Resin Part A and the Hardener Part B into a clean pail. Mix thoroughly until a consistent color is seen. Slowly add in Filler Part C, continuing to mix until the consistency is uniform. Mix only complete batches. Add the light gray Sika color pack slowly till it is thoroughly mixed and uniform color is seen. Do not add solvents to Dura-Plate 100 Epoxy Mortar.

Installation: Apply 1/8" (3 mm) in thickness with a trowel or spatula. Apply Dura-Plate 100 Epoxy Mortar at ambient temperatures of 45°F (7°C) and above. Do not apply once the material has begun to set up. Pot life and cure time of Dura-Plate 100 are dependent on temperature. Higher temperatures shorten these times. Lower temperatures lengthen these times.

Clean Up: Clean uncured material from equipment with Grime-Away™ Multi-Purpose Cleaning Wipes or Type HP™ Cleaner. Remove cured material mechanically. Clean hands with soap and water or Grime-Away™ Multi-Purpose Cleaning Wipes.

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A 5 gallon bucket of Duraplate 100 Epoxy Mortar covers an area of 25 sq. ft., 1/8” thick.

The amount of exposed concrete area (hole) that needs to be covered with epoxy sewergard when connectors are used in a Duraplate 100, lined 48” manhole with 5 inch thick walls is:

<table>
<thead>
<tr>
<th>A-LOK Connector</th>
<th>Exposed area to be covered</th>
</tr>
</thead>
<tbody>
<tr>
<td>#285</td>
<td>.962 sq. ft.</td>
</tr>
<tr>
<td>#410</td>
<td>1.31 sq. ft.</td>
</tr>
<tr>
<td>#610</td>
<td>1.86 sq. ft.</td>
</tr>
<tr>
<td>#800</td>
<td>2.28 sq. ft.</td>
</tr>
<tr>
<td>#1040</td>
<td>3.05 sq. ft.</td>
</tr>
<tr>
<td>#1240</td>
<td>3.62 sq. ft.</td>
</tr>
<tr>
<td>#1260</td>
<td>3.66 sq. ft.</td>
</tr>
<tr>
<td>#1420</td>
<td>4.10 sq. ft.</td>
</tr>
<tr>
<td>#1640</td>
<td>4.73 sq. ft.</td>
</tr>
<tr>
<td>#1860</td>
<td>5.35 sq. ft.</td>
</tr>
</tbody>
</table>

Dividing up a 5 gallon bucket when you don’t need it all.

<table>
<thead>
<tr>
<th>Square Feet</th>
<th>Part A</th>
<th>Part B</th>
<th>Sand</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>5/8 cup (5 fl oz)</td>
<td>1/2 cup</td>
<td>1 cup</td>
</tr>
<tr>
<td>2</td>
<td>1 1/4 cup</td>
<td>1 cup</td>
<td>2 cups</td>
</tr>
<tr>
<td>3</td>
<td>1 7/8 cup</td>
<td>1 1/2 cup</td>
<td>3 cups</td>
</tr>
<tr>
<td>4</td>
<td>2 1/2 cups</td>
<td>2 cups</td>
<td>4 cups</td>
</tr>
<tr>
<td>5</td>
<td>3 1/8 cups</td>
<td>2 1/2 cups</td>
<td>5 cups</td>
</tr>
</tbody>
</table>

NOTE: The amount of epoxy mortar needed will vary slightly due to wall thickness.
1. Identification of the substance/mixture and of the company

1.1 Product identifier

Product Name: Dura-Plate 100
Epoxy Mortar Type EM (Part A, Resin)

Product ID numbers: EM-KIT640

1.2 Relevant identified uses of the mixture and uses advised against

Identified uses: Acid resistant grout, Part A of 3-Part Sealant/Coating

List of advices against: Not applicable.

1.3 Details of the supplier of the safety data sheet

Supplier/Manufacturer:

American Polywater Corporation
11222 - 60th Street North
P.O. Box 53
Stillwater, MN 55082 USA
Tel: 1-651-430-2270
Email: custserv@polywater.com

1.4 Emergency telephone numbers

USA
+1-651-430-2270

2. Hazards Identification

2.1 Classification of the substance or mixture


Skin Irritation, Cat 2
Eye Irritation, Cat 2A
Skin Sensitization, Cat 1

2.2 Label elements

Pictograms:
Signal word: Warning

Hazard Statements:

H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H319 Causes serious eye irritation.

Precautionary Statements:

P264 Wash thoroughly after handling.
P280 Wear protective gloves, protective clothing and eye protection.
P302 + P352 IF ON SKIN: Wash with plenty of soap and water.
P332 + P313 If skin irritation occurs: Get medical attention..
P305 + P351 + IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.
3. Composition/Information on Ingredients

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS #</th>
<th>EC #</th>
<th>Wt. %</th>
<th>GHS/CLP Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phenol-Formaldehyde Polymer</td>
<td>28064-14-4</td>
<td>--</td>
<td>75-90</td>
<td>Skin Irrit 2, H315</td>
</tr>
<tr>
<td>Glycidyl Ether</td>
<td></td>
<td></td>
<td></td>
<td>Skin Sens 1, H317</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Eye Irrit 2A, H319</td>
</tr>
</tbody>
</table>

4. First Aid Measures

4.1 Description of first aid measures

**Eye Contact:** Immediately flush eyes with large quantity of water for 15 minutes. Seek medical attention.

**Skin Contact:** Remove contaminated clothing; flush skin thoroughly with soap and water for at least 15 minutes. If irritation or allergic reaction occurs, seek medical attention.

**Inhalation (Breathing):** If irritation of nose or throat develops, move to fresh air. If irritation persists, seek medical attention.

**Ingestion (Swallowing):** No emergency medical treatment necessary

4.2 Most important symptoms and effects, both acute and delayed

Refer to Section 11 for more information.

4.3 Indication of immediate medical attention and special treatment needed.

No information available.

5. Firefighting Measures

5.1 Extinguishing media:

Water fog or fine spray, dry chemical carbon dioxide, or foam.

5.2 Special hazards arising from the substance or mixture

Dense smoke is emitted when burned without sufficient oxygen.

**Hazardous decomposition and by-products:**

CO₂, CO, phenolics. May contain other combustion products of varying composition which may be toxic or irritating.

5.3 Advice for firefighters

Wear full protective clothing, including self-contained, positive pressure or pressure-demand breathing apparatus. Sealed container can build up pressure when exposed to high heat. Water fog may be used to cool fire exposed container to prevent pressure build-up and possible auto-ignition or rupture. Direct water stream may spread fire.

6. Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures:

Isolate area. Use appropriate safety equipment.

6.2 Environmental precautions:

Avoid release to the environment. Prevent spill from entering drainage/sewer systems, waterways, basements or confined areas. Refer to Section 12 for more information.

6.3 Methods materials for containment and cleaning up:

Absorb spill with sand or absorbents. Residual resin may be removed using steam or hot soapy water. Collect as much of the spilled material as possible using non-sparking tools and transfer to a container. Seal the container. Residual material can be removed with solvent.

6.4 Reference to other sections:
7. Handling and Storage

7.1 Precautions for safe handling
Avoid personal contact with the product. All containers should be disposed of in an environmentally safe manner and in accordance with governmental regulations. Wash thoroughly after handling. Wash contaminated clothing before reuse. For industrial or professional use only.

7.2 Conditions for safe storage, including incompatibilities
Keep containers cool, dry, and away from sources of ignition. Keep containers and cartridges capped and sealed. Protect from freezing. All containers should be disposed of in an environmentally safe manner and in accordance with governmental regulations.

7.3 Specific end uses
See technical data sheet on this product for further information.

8. Exposure Controls / Personal Protection

8.1 Control parameters
Exposure limits and recommendations:
Contains no components with established Occupational Exposure Limit (OEL) values.

8.2 Exposure controls
Respiratory protection:
Normal ventilation is adequate. If exposure exceeds recommended limits, respirator protection is recommended. Use a respirator or gas mask with cartridges for organic vapors (NIOSH-approved) or use supplied air equipment.

Protective gloves:
The use of chemically resistant gloves is recommended to prevent skin contact. Suitable materials include nitrile (included in most kits), neoprene, ethyl vinyl alcohol (EVAL), PVC.

Eye protection:
Safety glasses recommended.

Other protective equipment:
Use protective cream if skin contact is likely. Remove and wash contaminated clothing before reuse. Discard contaminated shoes.

9. Physical and Chemical

9.1 Information of basic physical and chemical properties
Appearance: Thick white paste.
Odor threshold: Not available
pH: Does not apply
Freezing point: Not available
Boiling point: Not available
Flash point: >302°F / >150°C (PMCC)
Evaporation rate: Not available
Flammability (solid, gas): Not available
Upper/lower flammability or explosive limits: Not available
Vapor pressure: Not available
Vapor density (Air = 1): >1
Specific gravity (H₂O = 1): 1.18 @ 25°C
Solubility in water: Not available
Partition coefficient: n-octanol/water: Not available
Auto-ignition temperature: Not available
Decomposition temperature: Not available
Viscosity: Not available

9.2 Other Information
Volatiles (Weight %): 0%
VOC Content: 0 g/l

10. Stability and Reactivity

10.1 Reactivity:
No dangerous reaction known under conditions of normal use.

10.2 Chemical stability:
Stable

10.3 Possibility of hazardous reactions:
Hazardous reactions will not occur under normal transport or storage conditions.

10.4 Conditions to avoid:
Avoid high temperatures above 300 °C (572 °F). Decomposition can occur above 350 °C (662 °F). Generation of gas during decomposition can cause pressure to build in closed systems.

10.5 Incompatible materials:
Strong acids or bases (especially primary or secondary aliphatic amines), strong oxidizing agents.

10.6 Hazardous decomposition products:
CO₂, CO, phenolics and other organic substances may be formed during combustion or elevated temperature degradation.

11. Toxicological Information

11.1 Information on toxicological effects:
Acute toxicity
Eye contact:
Direct eye contact with material or vapors may cause eye irritation.

Skin contact:
This product has moderate skin irritation potential. Persons with pre-existing skin disorders may be more susceptible to skin irritation from this material. Prolonged or repeated skin exposure may cause skin sensitization.

Irritation and Sensitization Potential:
May cause allergic skin reaction.

Inhalation (Breathing):
Low vapor pressure makes this route of exposure unlikely.

Ingestion:
Ingestion may cause irritation of the gastrointestinal tract.

Toxicity to Animals:
No information available.

Aspiration Hazard:
No aspiration hazard expected.

Chronic Exposure:
Reproductive Toxicity: Not available.
Mutagenicity: Not available.
Teratogenicity: Not available.
12. Ecological Information

12.1 Toxicity:
- Aquatic Toxicity: May be toxic to aquatic organisms.

12.2 Persistence and degradability:
Based on stringent OECD test guidelines, this material cannot be considered readily biodegradable. Biodegradability depends on environmental conditions.

12.3 Bioaccumulation potential:
Bioconcentration potential is high.

12.4 Mobility in soil:
Potential for mobility in soil is low.

12.5 Results of PBT and vPvB Assessment:
This product is not, nor does it contain a substance that is a PBT or vPvB.

12.6 Other adverse effects:
None known.

13. Disposal Considerations

Do not dump into sewer, on ground or into any body of water. Dispose of product in accordance with National and Local Regulations.

14. Transport Information

- DOT: Not Regulated
- UN Number: 3077
- UN Proper Shipping Name: Environmentally hazardous substance, solid, N.O.S. (Epoxy Resin)
- Class and Subsidiary Risk: 9
- Packing Group: III
- ICAO/IATA-DGR: 9, Marine Pollutant
- IMDG: 9, Marine Pollutant
- ADR/RID: 9

Transport Labels

Other information
For surface shipments within the United States: Not regulated.

15. Regulatory Information

USA Federal and State
All components are listed on the TSCA inventory.

<table>
<thead>
<tr>
<th>Hazard Categories for SARA Section 311/312 Reporting</th>
<th>Acute</th>
<th>Chronic</th>
<th>Fire</th>
<th>Pressure</th>
<th>Reactive</th>
</tr>
</thead>
<tbody>
<tr>
<td>Components</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>

CERCLA/SARA Sec 302
SARA Sec. 313

Components
Components are not affected by these Superfund regulations.
NFPA Ratings:  
- Health: 2  
- Fire: 1  
- Reactivity: 0

National Fire Protection Association (NFPA) hazard ratings are designed for use by emergency response personnel during spill, fire or similar emergencies. Hazard ratings are based on physical and toxic properties of combustion or decomposition.

**European Union**  
All components are listed on the European Inventory of Existing Chemical Substances (EINECS). Product complies with the communication requirements of REACH Regulation (EC) No. 1907/2006. It does not contain Substances of Very High Concern (SVHC).

**Canada**  
All components are listed on the DSL inventory. This product has been classified according to the hazard criteria of the CPR and the MSDS contains all the information required by the CPR.

**WHMIS Classification:** Class D, Division 2B

**Australia**

All components are listed on the AICS. Product is classified as hazardous according to criteria of NOHSC Australia.

### 16. Other Information

**Revision Date:** July 29, 2014  
**Revision Number:** 2  
**Supersedes:** August 2, 2010  
**Indication of Changes:** Updated in accordance with the provisions of OSHA 1910.1200 App D and REACH Annex II (EU No 453/2010). (GHS format)

The information and recommendations contained herein are believed to be reliable. However, the supplier makes no warranties, express or implied, concerning the use of this product. The buyer must determine conditions of safe usage and assumes all risk and liability in handling this product.
1. Identification of the substance/mixture and of the company

1.1 Product identifier

Product Name: Dura-Plate 100
Epoxy Mortar Type EM (Part B – Hardener)

Product ID numbers: EM-KIT640

1.2 Relevant identified uses of the mixture and uses advised against

Identified uses: Acid resistant grout, Part B of 3-Part Sealant/Coating
List of advices against: Not applicable.

1.3 Details of the supplier of the safety data sheet

Supplier/Manufacturer:

American Polywater Corporation
11222 - 60th Street North
P.O. Box 53
Stillwater, MN 55082 USA
Tel: 1-651-430-2270
Email: custserv@polywater.com

Polywater Europe BV
Zuidhaven 9-11 Unit B2
4761 CR Zevenbergen
Netherlands
Tel: +31 (0)10 2330578
Email: custserv@polywater.com

1.4 Emergency telephone numbers

USA
+1-651-430-2270

Europe
+31 (0)10 2330578

2. Hazards Identification

2.1 Classification of the substance or mixture


Skin Irritation, Cat 2
Eye Irritation, Cat 2
STOT RE (oral), Cat 2
Chronic Aquatic Tox 3

2.2 Label elements

Pictograms: 

Signal word: Warning

Hazard Statements:

H315 Causes skin irritation.
H320 Causes eye irritation.
H373 May cause damage to the kidneys through prolonged or repeated exposure.
H412 May cause long lasting harmful effects to aquatic life.

Precautionary Statements:

P264 Wash thoroughly after handling.
P280 Wear protective gloves, protective clothing and eye protection.
P302 + P352 IF ON SKIN: Wash with plenty of soap and water.
Product Name: Dura-Plate 100 Epoxy Mortar Type EM

P332 + P313 If skin irritation occurs: Get medical attention.
P305 + P351 + IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.
P337 + P313 If eye irritation persists. Get medical attention.

2.3 Other hazards: No information available.

3. Composition/Information on Ingredients

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS #</th>
<th>EC #</th>
<th>Wt. %</th>
<th>GHS/CLP Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Polyamide resin</td>
<td>Proprietary</td>
<td>Proprietary</td>
<td>30 - 60</td>
<td>Acute Tox, H302, H332</td>
</tr>
<tr>
<td>Benzyl alcohol</td>
<td>100-51-6</td>
<td>202-859-9</td>
<td>15 - 40</td>
<td></td>
</tr>
<tr>
<td>Mixed Cycloaliphatic amines</td>
<td>Proprietary</td>
<td>Proprietary</td>
<td>10 - 30</td>
<td>Acute Tox. 4, H312</td>
</tr>
<tr>
<td>Triethylenetetramine</td>
<td>112-24-3</td>
<td>203-950-6</td>
<td>&lt; 5</td>
<td>Skin Corr. 1AB, H314</td>
</tr>
<tr>
<td>Tertiary amine</td>
<td>Proprietary</td>
<td>Proprietary</td>
<td>&lt; 10</td>
<td>Skin Sens. 1 H317</td>
</tr>
<tr>
<td>Organic acid</td>
<td>Proprietary</td>
<td>Proprietary</td>
<td>0.5 – 1.5</td>
<td>Aquatic Chronic 3 H412</td>
</tr>
</tbody>
</table>

4. First Aid Measures

4.1 Description of first aid measures

Eye Contact: Immediately flush eyes with large quantity of water for 15 minutes. Seek medical attention.

Skin Contact: Remove contaminated clothing; flush skin thoroughly with soap and water for at least 15 minutes. If irritation or allergic reaction occurs, seek medical attention.

Inhalation (Breathing): If irritation of nose or throat develops, move to fresh air. If irritation persists, seek medical attention.

Ingestion (Swallowing): Wash out mouth with water. Do not induce vomiting. If victim is unconscious, place on the left side with head down. Never give anything by mouth to an unconscious person. Do not leave victim unattended. Seek medical attention.

4.2 Most important symptoms and effects, both acute and delayed

Refer to Section 11 for more information.

4.3 Indication of immediate medical attention and special treatment needed.

No information available.

5. Firefighting Measures

5.1 Extinguishing media:

Water fog or fine spray, dry chemical carbon dioxide, or foam.

5.2 Special hazards arising from the substance or mixture

Dense smoke is emitted when burned without sufficient oxygen.

Hazardous decomposition and by-products:

May generate ammonia gas. Oxides of carbon, oxides of sulfur, oxides of nitrogen. May contain other combustion products of varying composition which may be toxic or irritating.

5.3 Advice for firefighters

Wear full protective clothing, including self-contained, positive pressure or pressure-demand breathing apparatus. Sealed container can build up pressure when exposed to high heat. Water fog may be used to cool fire exposed container to prevent pressure build-up and possible auto-ignition or rupture. Direct water stream may spread fire.
6. Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures:
Isolate area. Use appropriate safety equipment.

6.2 Environmental precautions:
Avoid release to the environment. Refer to Section 12 for more information.

6.3 Methods materials for containment and cleaning up:
Absorb spill with sand or absorbents. Residual resin may be removed using steam or hot soapy water. Collect as much of the spilled material as possible using non-sparking tools and transfer to a container. Seal the container. Residual material can be removed with solvent.

6.4 Reference to other sections:
Refer to Sections 4, 5, 8, and 13 for more information.

7. Handling and Storage

7.1 Precautions for safe handling
Avoid contact with skin, eyes, or clothing. Uncured Hardener, Part B is a skin irritant. All containers should be disposed of in an environmentally safe manner and in accordance with governmental regulations. Wash thoroughly after handling. Wash contaminated clothing before reuse. For industrial or professional use only.

7.2 Conditions for safe storage, including incompatibilities
Keep containers cool, dry, and away from sources of ignition. Keep containers and cartridges capped and sealed. Protect from freezing. All containers should be disposed of in an environmentally safe manner and in accordance with governmental regulations.

7.3 Specific end uses
See technical data sheet on this product for further information.

8. Exposure Controls / Personal Protection

8.1 Control parameters
Exposure limits and recommendations:
Contains no components with established Occupational Exposure Limit (OEL) values.

8.2 Exposure controls
Respiratory protection:
Normal ventilation is adequate. If exposure exceeds recommended limits, respirator protection is recommended. Use a respirator or gas mask with cartridges for organic vapors (NIOSH-approved) or use supplied air equipment.

Protective gloves:
The use of chemically resistant gloves is recommended to prevent skin contact. Suitable materials include nitrile, neoprene, butyl rubber, PVC.

Eye protection:
Safety glasses should be worn.

Other protective equipment:
Use protective cream if skin contact is likely. Remove and wash contaminated clothing before reuse. Discard contaminated shoes.

9. Physical and Chemical

9.1 Information of basic physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Tan paste</td>
</tr>
<tr>
<td>Odor threshold</td>
<td>Not available</td>
</tr>
<tr>
<td>pH</td>
<td>10</td>
</tr>
<tr>
<td>Freezing point</td>
<td>Not available</td>
</tr>
</tbody>
</table>
Boiling point: Not available
Flash point: 243°F / 117°C
Evaporation rate: <1 (n-butyl acetate = 1)
Flammability (solid, gas): Not available
Upper/lower flammability or explosive limits: Not available
Vapor pressure: 3 mm Hg @ 20°C
Vapor density (Air = 1): Not available
Specific gravity (H₂O = 1): 1.03 @ 20°C
Solubility in water: Slightly soluble.
Partition coefficient: n-octanol/water: Not available
Auto-ignition temperature: Not available
Decomposition temperature: Not available
Viscosity: Not available

9.2 Other Information
Volatiles (Weight %): 0%
VOC Content: 0 g/l

10. Stability and Reactivity

10.1 Reactivity:
No dangerous reaction known under conditions of normal use.

10.2 Chemical stability:
Stable

10.3 Possibility of hazardous reactions:
Hazardous reactions will not occur under normal transport or storage conditions.

10.4 Conditions to avoid:
Avoid extreme heat and open flame.

10.5 Incompatible materials:
Avoid nitrous acid and other nitrosating agents. N-Nitrosamines, many of which are known to be potent carcinogens may be formed when the product comes in contact with nitrous acid, nitrites or atmospheres with high nitrous oxide concentrations. Avoid reactive metals, organic or mineral acids, sodium hypochlorite and peroxides.

10.6 Hazardous decomposition products:
Oxides of carbon, oxides of sulfur, oxides of nitrogen and other organic substances may be formed during combustion or elevated temperature degradation.

11. Toxicological Information

11.1 Information on toxicological effects:
Acute toxicity

Eye contact:
Causes eye irritation. Corneal edema may give rise to a perception of “blue haze” or “fog” around lights. Exposed individuals may see rings around bright lights. This effect is temporary and has no known residual effect. Product vapor can cause glaucopsia (corneal edema) when absorbed into the tissue of the eye from the atmosphere.

Skin contact:
May cause severe skin irritation, especially on prolonged contact. Prolonged or repeated skin exposure may cause skin sensitization.

Irritation and Sensitization Potential:
This product may be a sensitizer.

**Inhalation (Breathing):**
Low vapor pressure makes this route of exposure unlikely. May cause central nervous system effects, such as headache, nausea, dizziness, confusion, breathing difficulties.

**Ingestion:**
Material is considered slightly toxic. Ingestion may cause irritation of the gastrointestinal tract, nausea, vomiting, and diarrhea.

**Toxicity to Animals:**

<table>
<thead>
<tr>
<th>Substance</th>
<th>LD₅₀ (oral rat)</th>
<th>LD₅₀ (inhl rat)</th>
<th>LD₅₀ (dermal rabbit)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Polyamide resin</td>
<td>&gt;2,000 mg/kg</td>
<td>&gt;4.178 mg/l (OECD Test Guideline 403)</td>
<td>2,000 mg/kg</td>
</tr>
<tr>
<td>Benzyl alcohol</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mixed cycloaliphatic amines</td>
<td>LD₅₀ (dermal rabbit) &gt;1,000 mg/kg</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Triethylenetetramine</td>
<td>LD₅₀ (oral rat) 2,780 mg/kg</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tertiary amine</td>
<td>LD₅₀ (dermal rabbit) 550 mg/kg</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Aspiration Hazard:**
No aspiration hazard expected.

**Chronic Exposure:**
- **Reproductive Toxicity:** Not available.
- **Mutagenicity:** Not available.
- **Teratogenicity:** Not available.
- **Specific Target Organ Toxicity (STOT):** Not available.
- **Toxicologically Synergistic Products:** Not available.
- **Carcinogenic Status:** This substance has not been identified as a carcinogen or probable carcinogen by NTP, IARC, or OSHA, nor have any of its components.

### 12. Ecological Information

**12.1 Aquatic Toxicity:**
- Benzyl alcohol 96 h LC₅₀ Fathead Minnow 460 mg/l
- 96 h LC₅₀ Bluegill sunfish: 10 mg/l
- 72 h LC₅₀ Algae 700 mg/l

**12.2 Persistence and degradability:** Not available.

**12.3 Bioaccumulation potential:** Benzyl alcohol – low bioaccumulation potential

**12.4 Mobility in soil:** Not available.

**12.5 Results of PBT and vPvB Assessment:** This product is not, nor does it contain a substance that is a PBT or vPvB.

**12.6 Other adverse effects:** None known.

### 13. Disposal Considerations

Do not dump into sewer, on ground or into any body of water. Dispose of product in accordance with National and Local Regulations.

### 14. Transport Information

**DOT:** Not Regulated
**UN Number:** Not Listed
15. Regulatory Information

USA Federal and State
All components are listed on the TSCA inventory.

<table>
<thead>
<tr>
<th>Hazard Categories for SARA Section 311/312 Reporting</th>
<th>Acute</th>
<th>Chronic</th>
<th>Fire</th>
<th>Pressure</th>
<th>Reactive</th>
</tr>
</thead>
<tbody>
<tr>
<td>CERCLA/SARA Sec 302 Hazardous Substance RQ</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>SARA Sec. 313 EHS TPQ</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>

Components are not affected by these Superfund regulations.

NFPA Ratings:
- Health: 2
- Fire: 1
- Reactivity: 0

National Fire Protection Association (NFPA) hazard ratings are designed for use by emergency response personnel during spill, fire or similar emergencies. Hazard ratings are based on physical and toxic properties of combustion or decomposition.

European Union
All components are listed on the European Inventory of Existing Chemical Substances (EINECS). Product complies with the communication requirements of REACH Regulation (EC) No. 1907/2006. It does not contain Substances of Very High Concern (SVHC).

Canada
All components are listed on the DSL inventory. This product has been classified according to the hazard criteria of the CPR and the MSDS contains all the information required by the CPR.

WHMIS Classification: Class D, Division 2B

16. Other Information

Revision Date: July 29, 2014
Revision Number: 2
Supersedes: August 3, 2010
Indication of Changes: Updated in accordance with the provisions of OSHA 1910.1200 App D and REACH Annex II (EU No 453/2010). (GHS format)

The information and recommendations contained herein are believed to be reliable. However, the supplier makes no warranties, express or implied, concerning the use of this product. The buyer must determine conditions of safe usage and assumes all risk and liability in handling this product.
SAFETY DATA SHEET

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

1.1 Product identifier

Product Name: Dura-Plate 100
Epoxy Mortar Type EM (Part C – Filler)

Product ID numbers: EM-KIT640

1.2 Relevant identified uses of the mixture and uses advised against

Identified uses: Acid resistant grout, Part C of 3-Part Sealant/Coating

List of advices against: Not applicable.

1.3 Details of the supplier of the safety data sheet

Supplier/Manufacturer:

American Polywater Corporation Polywater Europe BV
11222 - 60th Street North Zuidhaven 9-11 Unit B2
P.O. Box 53 4761 CR Zevenbergen
Stillwater, MN 55082 USA Netherlands
Tel: 1-651-430-2270 Tel: +31 (0)10 2330578
Email: custserv@polywater.com Email: custserv@polywater.com

1.4 Emergency telephone numbers

USA Europe
+1-651-430-2270 +31 (0)10 2330578

2. Hazards Identification

2.1 Classification of the substance or mixture

Classification according to OSHA 29 CFR 1910.1200.
This product contains no reportable hazardous components according to US Federal regulations.

Classification according to Regulation (EC) No 1272/2008
This product is not classified as dangerous according to EC criteria.

2.2 Label elements

Pictograms: None required.
Hazard Statements: None required.

2.3 Other hazards: No information available.

3. Composition/Information on Ingredients

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS #</th>
<th>EC #</th>
<th>Wt. %</th>
<th>GHS/CLP Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Silica, Crystalline Quartz</td>
<td>14808-60-7</td>
<td>238-878-4</td>
<td>75 – 100</td>
<td>--</td>
</tr>
</tbody>
</table>

4. First Aid Measures

4.1 Description of first aid measures

Eye Contact: Flush eyes with a large quantity of water for 15 minutes. If irritation continues, seek medical attention.

Skin Contact: If skin becomes irritated, wash area thoroughly with soap and water. If irritation continues, seek medical attention.

Inhalation (Breathing): If irritation of nose or throat develops, move to fresh air. If irritation persists, seek medical attention.
**Ingestion (Swallowing):** Drink one or two glasses of milk or water. Do not induce vomiting. If victim is unconscious, place on the left side with head down. Never give anything by mouth to an unconscious person. Do not leave victim unattended. Seek medical attention.

4.2 *Most important symptoms and effects, both acute and delayed*
Aside from information above, no additional symptoms and effects are anticipated.

4.3 *Indication of immediate medical attention and special treatment needed.*
No information available.

5. **Firefighting Measures**

5.1 *Extinguishing media:*
Does not apply.

5.2 *Special hazards arising from the substance or mixture*

- **Hazardous decomposition and by-products:**
  Does not apply.

5.3 *Advice for firefighters*
None.

6. **Accidental Release Measures**

6.1 *Personal precautions, protective equipment and emergency procedures:*
No special procedures are required for the clean-up of spills or leaks of this material. Sweep or scoop up spill, avoid creating dust, and return for reuse or discard.

6.2 *Environmental precautions:*
None.

6.3 *Methods materials for containment and cleaning up:*
Does not apply.

6.4 *Reference to other sections:*
Refer to Sections 4, 5, 8, and 13 for more information.

7. **Handling and Storage**

7.1 *Precautions for safe handling*
Avoid spills and clean them up immediately when they occur. Product is very slippery. For industrial or professional use only.

7.2 *Conditions for safe storage, including incompatibilities*
Keep product containers closed when not in use.

7.3 *Specific end uses*
See technical data sheet on this product for further information.

8. **Exposure Controls / Personal Protection**

8.1 *Control parameters*

<table>
<thead>
<tr>
<th>Component Name</th>
<th>Limit</th>
<th>Standard</th>
<th>Source/Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>Silica, Crystalline Quartz</td>
<td>PEL 10 mg/m³ *</td>
<td>MSHA/ACGIH</td>
<td>USA</td>
</tr>
<tr>
<td></td>
<td>TLV 3 mg/m³ **</td>
<td>ACGIH</td>
<td>USA</td>
</tr>
<tr>
<td></td>
<td>PEL 5 mg/m³ **</td>
<td>OSHA</td>
<td>USA</td>
</tr>
</tbody>
</table>

* nuisance particulate
** respirable particulate, not otherwise regulated.
8.2 Exposure controls
Respiratory protection:
None required for normal handling temperatures and conditions.

Protective gloves:
For repeated or prolonged skin contact, the use of gloves is recommended to prevent possible irritation.

Eye protection:
Eye protection is recommended, especially if the material is used in ways where it could contact the eyes.

9. Physical and Chemical

9.1 Information of basic physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance:</td>
<td>Tan sand</td>
</tr>
<tr>
<td>Odor threshold:</td>
<td>Not Available</td>
</tr>
<tr>
<td>pH:</td>
<td>6.0 – 8.0</td>
</tr>
<tr>
<td>Freezing point:</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Boiling point:</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Flash point:</td>
<td>None</td>
</tr>
<tr>
<td>Evaporation rate:</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Flammability (solid, gas):</td>
<td>Product is not flammable</td>
</tr>
<tr>
<td>Upper/lower flammability or</td>
<td>Does not apply</td>
</tr>
<tr>
<td>explosive limits:</td>
<td></td>
</tr>
<tr>
<td>Vapor pressure:</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Vapor density (Air = 1):</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Specific gravity (H₂O = 1):</td>
<td>2.5 – 2.8</td>
</tr>
<tr>
<td>Solubility in water:</td>
<td>Not Available</td>
</tr>
<tr>
<td>Partition coefficient: n-</td>
<td></td>
</tr>
<tr>
<td>octanol/water:</td>
<td>Not Available</td>
</tr>
<tr>
<td>Auto-ignition temperature:</td>
<td>Does not apply</td>
</tr>
<tr>
<td>Decomposition temperature:</td>
<td>Not Available</td>
</tr>
</tbody>
</table>

9.2 Other Information

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Volatiles (Weight %)</td>
<td>0%</td>
</tr>
<tr>
<td>VOC Content</td>
<td>0 g/l</td>
</tr>
</tbody>
</table>

10. Stability and Reactivity

10.1 Reactivity:
No dangerous reaction known under conditions of normal use.

10.2 Chemical stability:
Stable

10.3 Possibility of hazardous reactions:
None known.

10.4 Conditions to avoid:
None known.

10.5 Incompatible materials:
Strong oxidizing agents.

10.6 Hazardous decomposition products:
Silica-containing respirable dust particles may be generated by handling.
11. Toxicological Information

11.1 Information on toxicological effects:

Acute toxicity

Eye contact:
Can cause moderate irritation due to abrasive action.

Skin contact:
Can cause slight irritation.

Irritation and Sensitization Potential:
This product has low skin irritation potential. It is not a sensitizer.

Inhalation (Breathing):
May be harmful by inhalation (after often repeated exposure). May cause irritation of respiratory tract.

Ingestion:
Expected to be practically non-toxic. Ingestion of large amounts may cause gastrointestinal irritation and blockage.

Aspiration hazard
Not an aspiration hazard.

Chronic Exposure:

Reproductive Toxicity: Not Available
Mutagenicity: Not Available
Teratogenicity: Not Available
Toxicologically Synergistic Products: Not Available
Carcinogenic Status: This substance has not been identified as a carcinogen or probable carcinogen by NTP, IARC, or OSHA, nor have any of its components.

12. Ecological Information

12.1 Ecotoxicity: No information available.
12.2 Persistence and degradability: No information available.
12.3 Bioaccumulation potential: No information available
12.4 Mobility in soil: No information available.
12.5 Results of PBT and vPvB Assessment: This product is not, nor does it contain a substance that is a PBT or vPvB.
12.6 Other adverse effects: None known.

13. Disposal Considerations

Dispose of product in accordance with National and Local Regulations.

14. Transport Information

UN Number: Not Listed
UN Proper shipping name: Not Applicable
Transport hazard class(es): Not Applicable
Packing group: Not Applicable
Environmental hazards: None known
Special precautions: None known
TDG: Not Regulated
ICAO/IATA-DGR: Not Regulated
IMDG: Not Regulated
15. Regulatory Information

USA Federal and State
All components are listed on the TSCA inventory.

<table>
<thead>
<tr>
<th>Hazard Categories for SARA</th>
<th>Acute</th>
<th>Chronic</th>
<th>Fire</th>
<th>Pressure</th>
<th>Reactive</th>
</tr>
</thead>
<tbody>
<tr>
<td>Section 311/312 Reporting</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>

CERCLA/SARA Sec 302 SARA Sec. 313
Components

<table>
<thead>
<tr>
<th>Hazardous Substance RQ</th>
<th>EHS TPQ</th>
<th>Toxic Release</th>
</tr>
</thead>
<tbody>
<tr>
<td>Components are not affected by these Superfund regulations.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

European Union
All components are listed on the European Inventory of Existing Chemical Substances (EINECS). Product complies with the communication requirements of REACH Regulation (EC) No. 1907/2006. It does not contain Substances of Very High Concern (SVHC).

Canada
All components are listed on the DSL inventory. This product has been classified according to the hazard criteria of the CPR and the MSDS contains all the information required by the CPR.

WHMIS Classification: NC

Australia
All components are listed on the AICS. Classified as hazardous according to criteria of NOHSC Australia.

16. Other Information

Revision Date: July 29, 2014
Revision Number: 2
Supersedes: August 3, 2010
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