Section 1. Identification

Trade Name: DSB High Strength Epoxy - Part B
Supplier/Manufacturer: The D.S. Brown Company
300 East Cherry Street
North Baltimore, Ohio 45872

Emergency Telephone Number: Use only in the event of an emergency involving a spill, leak, fire, exposure, or accident involving chemicals. Within the U.S., Canada, or the U.S. Virgin Islands, call: Chemtrec 1-800-424-9300 International 01-703-741-5500.

Section 2. Hazards Identification

Classification of the Substance or Mixture:
- Acute Tox. 4  H332  Harmful if inhaled.
- Skin Corr. 1C  H314  Causes severe skin burns and eye damage.
- Eye Dam. 1  H318  Causes serious eye damage.
- Skin Sens. 1  H317  May cause an allergic skin reaction.
- Repr. 2  H361  Suspected of damaging fertility or the unborn child.
- Aquatic Acute 3  H402  Harmful to aquatic life.
- Aquatic Chronic 3  H412  Harmful to aquatic life with long lasting effects.

GHS Label Elements: The product is classified and labeled according to the Globally Harmonized System (GHS). GHS05, GHS07, GHS08

Hazard Classifications: GHS05, GHS07, GHS08

Hazard Pictograms: 

Signal Word: Danger

Hazard-Determining Components of Labeling:
- m-phenylenebis(methylamine)
- cyclohex-1,2-ylene diamine

Hazard Statements:
- Harmful if inhaled.
- Causes severe skin burns and eye damage.
- May cause an allergic skin reaction.
- Suspected of damaging fertility or the unborn child.
- Harmful to aquatic life.
- Harmful to aquatic life with long lasting effects.

Precautionary Statements:
- Do not breathe dusts or mists.
- **If on skin (or hair):** Take off immediately all contaminated clothing. Rinse skin with water/shower.
- **If in eyes:** Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- Immediately call a POISON CENTER/doctor.
Section 2. Hazards Identification  cont’d.

Specific treatment (see on this label)
Store locked up.
Dispose of contents/container in accordance with local/regional/national/international regulations.

Classification System

NFPA Ratings (Scale 0-4)
- Health = 3
- Fire = 1
- Reactivity = 2

HMIS-Ratings (Scale 0-4)
- Health = 3
- Fire = 1
- Reactivity = 2

Other Hazards: Results of PBT and vPvB assessment:
- PBT: Not applicable.
- vPvB: Not applicable.

Section 3. Composition/Information on Ingredients

Chemical Characterization: Mixtures
Description: Mixture of the substances listed below with nonhazardous additions.
Dangerous Components: As follows.

<table>
<thead>
<tr>
<th>Dangerous Component</th>
<th>CAS No.</th>
<th>Weight %</th>
</tr>
</thead>
<tbody>
<tr>
<td>calcium carbonate</td>
<td>471-34-1</td>
<td>&lt;70%</td>
</tr>
<tr>
<td>nonylphenol</td>
<td>104-40-5</td>
<td>&lt;20%</td>
</tr>
<tr>
<td>m-phenylenebis(methylamine)</td>
<td>1477-55-0</td>
<td>≥5-&lt;15%</td>
</tr>
<tr>
<td>Quartz (SiO2)</td>
<td>14808-60-7</td>
<td>≥0.1-&lt;3.75%</td>
</tr>
<tr>
<td>Magnesite</td>
<td>546-93-0</td>
<td>&lt;1.2%</td>
</tr>
<tr>
<td>cyclohex-1,2-ylenediamine</td>
<td>694-83-7</td>
<td>≥0.1-&lt;0.7%</td>
</tr>
<tr>
<td>Distillates (petroleum), hydrotreated light paraffinic</td>
<td>64742-55-8</td>
<td>≥0.1-≤0.3%</td>
</tr>
</tbody>
</table>

Additional information: For the wording of the listed hazard phrases refer to section 16.

Section 4. First Aid Measures

General Information: Immediately remove any clothing soiled by the product.
In the event of persistent symptoms receive medical treatment.
Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

After Inhalation: Supply fresh air. If required, provide artificial respiration. Keep patient warm.
Consult doctor if symptoms persist.
In case of unconsciousness place patient stably in side position for transportation.
Immediately move exposed person to fresh air. If breathing difficulty persists or develops get prompt medical attention.
Section 4. First Aid Measures  cont’d.

After Skin Contact: Immediately wash with water and soap and rinse thoroughly. If skin irritation continues, consult a doctor.
After Eye Contact: Rinse opened eye for several minutes under running water. Then consult a doctor.
After Swallowing: Immediately call a doctor. Drink copious amounts of water and provide fresh air. Immediately call a doctor. Seek medical treatment.

Information for Doctor Most Important Symptoms and Effects, Both Acute and Delayed: No further relevant information available.
Indication of Any Immediate Medical Attention and Special Treatment Needed: No further relevant information available.

Section 5. Fire-Fighting Measures

Suitable Extinguishing Media: CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
Special Hazards Arising From the Substance or Mixture: No further relevant information available.
Advice for Firefighters Protective Equipment: Because fire may produce thermal decomposition products, wear a self-contained breathing apparatus (SCBA) with a full face piece operated in pressure-demand or positive-pressure mode. Mouth respiratory protective device.

Section 6. Accidental Release Measures

Environmental Precautions: Do not allow product to reach sewage system or any water course. Inform respective authorities in case of seepage into water course or sewage system.
Methods and Material for Containment and Clean-Up: Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders sawdust). Use neutralizing agent. Dispose contaminated material as waste according to item 13. Ensure adequate ventilation.
Reference to Other Sections: See Section 7 for information on safe handling. See Section 8 for information on personal protection equipment. See Section 13 for disposal information.
Section 7. Handling and Storage

HANDLING

Precautions for Safe Handling : Wear appropriate personal protective clothing to prevent eye and skin contact. Avoid breathing vapors or mists of this product. Use with adequate ventilation. Do not take internally.

Information About Protection Against Explosions and Fires : Keep respiratory protective device available.

CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES

Storage Requirements to Be Met by Storerooms and Receptacles : Store in a cool dry location.

Information About Storage in One Common Storage Facility : Store away from incompatible materials.

Further Information About Storage Conditions : Keep receptacle tightly sealed.

Specific End Use(s) : No further relevant information available.

Section 8. Exposure Controls/Personal Protection cont’d.

Additional Information About Design of Technical Systems : No further data; see item 7.

Components with Limit Values that Require Monitoring at the Workplace : The following constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit. At this time, the other constituents have no known exposure limits.

<table>
<thead>
<tr>
<th>Constituent</th>
<th>PEL Long-term value</th>
<th>REL Long-term value</th>
<th>TLV</th>
</tr>
</thead>
<tbody>
<tr>
<td>471-34-1 calcium carbonate</td>
<td>15* 5** mg/m³</td>
<td>10* 5** mg/m³</td>
<td></td>
</tr>
<tr>
<td></td>
<td>*total dust **respirable fraction</td>
<td>*total dust **respirable fraction</td>
<td></td>
</tr>
<tr>
<td>1477-55-0 m-phenylenebis(methylamine)</td>
<td>0.1 mg/m³</td>
<td>Ceiling limit value: 0.1 mg/m³</td>
<td>Ceiling limit value: 0.1 mg/m³, 0.018 ppm</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Skin</td>
<td>Skin</td>
</tr>
<tr>
<td>14808-60-7 Quartz (SiO2)</td>
<td>0.05* mg/m³</td>
<td>0.05* mg/m³</td>
<td></td>
</tr>
<tr>
<td></td>
<td>*respirable dust; 30mg/m3/%SiO2+2</td>
<td>*respirable dust; See Pocket Guide App. A</td>
<td>*as respirable fraction</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Section 8. Exposure Controls/Personal Protection  cont’d.

<table>
<thead>
<tr>
<th>Component</th>
<th>PEL Long-term value</th>
<th>REL Long-term value</th>
<th>TLV</th>
</tr>
</thead>
<tbody>
<tr>
<td>546-93-07 Magnesite</td>
<td>15* 5** mg/m³ **total dust **respirable fraction</td>
<td>10* 5** mg/m³ **total dust **respirable fraction</td>
<td>TLV withdrawn</td>
</tr>
</tbody>
</table>

Additional Information About Design of Technical Systems: No further data; see item 7.

Components with Limit Values that Require Monitoring at the Workplace: The following constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit. At this time, the other constituents have no known exposure limits.

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. Store protective clothing separately. Avoid contact with the eyes and skin.

Breathing Equipment: In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.

Protection of Hands: Protective gloves. The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Eye Protection: Wear appropriate eye protection to prevent eye contact.
### Section 9. Physical and Chemical Properties

**Appearance**
- **Form**: Liquid
- **Color**: Grey
- **Odor**: Distinctive
- **Odor Threshold**: Not determined.
- **pH-Value**: Not determined.

**Change in Condition**
- **Melting Point/Melting Range**: Undetermined
- **Boiling Point/Boiling Range**: Undetermined

**Flammable Properties**
- **Flash Point**: >94 °C (>201.2 °F)
- **Flammability (Solid, Gaseous)**: Not applicable.
- **Ignition Temperature**: 370 °C (698 °F)
- **Decomposition Temperature**: Not determined.
- **Auto Igniting**: Product is not self-igniting.
- **Danger of Explosion**: Product does not present an explosion hazard.

**Explosion Limits**
- **Lower**: 1.0 Vol %
- **Upper**: 0.0 Vol %

**Vapor Pressure**: Not determined.

**Density at 20 °C (68 °F)**: 1.776 g/cm³ (14.821 lbs/gal)

**Relative Density**: Not determined.

**Vapor Density**: Not determined.

**Evaporation Rate**: Not determined.

**Solubility In / Miscibility with Water**: Not miscible or difficult to mix.

**Partition Coefficient (n-octanol/water)**: Not determined.

**Viscosity**
- **Dynamic**: Not determined.
- **Kinematic**: Not determined.

**Solvent Content**
- **Solids content**: 100.0 %

**Other Information**: No further relevant information available.

**Volatile Organic Compounds**: Contains less than 10 g/L
Section 10. Stability and Reactivity

<table>
<thead>
<tr>
<th>Reactivity</th>
<th>No decomposition if stored and applied as directed.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chemical Stability</td>
<td>No decomposition if stored and applied as directed.</td>
</tr>
<tr>
<td>Thermal Decomposition /</td>
<td>No decomposition if used according to specifications.</td>
</tr>
<tr>
<td>Conditions to be Avoided</td>
<td></td>
</tr>
<tr>
<td>Possibility of Hazardous</td>
<td>Reacts with acids, alkalis and oxidizing agents.</td>
</tr>
<tr>
<td>Reactions</td>
<td></td>
</tr>
<tr>
<td>Conditions to Avoid</td>
<td>Keep away from heat and sources of ignition.</td>
</tr>
<tr>
<td>Incompatible Materials</td>
<td>No further relevant information available.</td>
</tr>
<tr>
<td>Hazardous Decomposition</td>
<td>Carbon monoxide and carbon dioxide</td>
</tr>
<tr>
<td>Products</td>
<td>Nitrogen oxides</td>
</tr>
</tbody>
</table>

Section 11. Toxicological Information

ACUTE TOXICITY

LD/LC50 values that are relevant for classification:

- 1477-55-0 m-phenylenebis(methylamine)
  - Oral          LD50            1040 mg/kg (rat)
  - Inhalative    LC50/4         h 2.4 mg/l (rat)

Primary Irritant Effect

- On the Skin: May cause skin irritation.
- On the Eye: Strong caustic effect. Strong irritant with the danger of severe eye injury.

Sensitization

- No sensitizing effects known.

Additional Toxicological Information

- The product shows the following dangers according to internally approved calculation methods for preparations:
  - Harmful
  - Corrosive
  - Irritant
  - Swallowing will lead to a strong caustic effect on mouth and throat and to the danger of perforation of esophagus and stomach.

CARCINOGENIC CATEGORIES

- IARC (International Agency for Research on Cancer): 14808-60-7 Quartz (SiO2)
- NTP (National Toxicology Program): 14808-60-7 Quartz (SiO2)
- OSHA-Ca (Occupational Safety & Health Administration): None of the ingredients is listed.
Section 12. Ecological Information

Toxicity
Aquatic Toxicity : No further relevant information available.
Persistence and Degradability : No further relevant information available.
Behavior in Environmental Systems:
Bioaccumulative Potential : No further relevant information available.
Mobility in Soil : No further relevant information available.
Additional Ecological Information:
General Notes : Water hazard class 1 (Self-assessment): slightly hazardous for water Must not reach bodies of water or drainage ditch undiluted or unneutralized.
Results of PBT and vPvB Assessment : PBT: Not applicable.
                          vPvB: Not applicable.
Other Adverse Effects : No further relevant information available.

Section 13. Disposal Considerations

Waste Treatment Methods Recommendation : Must not be disposed of as normal garbage. Do not allow product to reach sewage system.
It is the generator’s responsibility to determine if the waste meets applicable definitions of hazardous waste. State and local regulations may differ from federal disposal regulations. Dispose of waste material according to local, state, federal, and provincial environmental regulations.

Uncleaned Packaging Recommendation : Disposal must be made according to federal, state, and local regulations.
### Section 14. Transport Information

<table>
<thead>
<tr>
<th>UN-Number</th>
<th>DOT, ADR, IMDG, IATA</th>
<th>UN1760</th>
</tr>
</thead>
<tbody>
<tr>
<td>UN Proper Shipping Name</td>
<td>DOT, IATA</td>
<td>Corrosive liquids, n.o.s. (nonylphenol).</td>
</tr>
<tr>
<td>ADR 1760</td>
<td>Corrosive liquids, n.o.s. (nonylphenol); ENVIRONMENTALLY HAZARDOUS</td>
<td></td>
</tr>
<tr>
<td>IMDG</td>
<td>CORROSIVE LIQUID, N.O.S. (nonylphenol), MARINE POLLUTANT.</td>
<td></td>
</tr>
<tr>
<td>Transport Hazard Class(es) DOT</td>
<td></td>
<td>[Class: 8 Corrosive substances. Label: 8]</td>
</tr>
<tr>
<td>ADR, IATA</td>
<td></td>
<td>[Class: 8 Corrosive substances. Label: 8]</td>
</tr>
<tr>
<td>IMDG</td>
<td></td>
<td>[Class: 8 Corrosive substances. Label: 8]</td>
</tr>
<tr>
<td>Packing Group DOT, ADR, IMDG, IATA</td>
<td>III</td>
<td></td>
</tr>
<tr>
<td>Environmental Hazards</td>
<td>Product contains environmentally hazardous substances: nonylphenol</td>
<td></td>
</tr>
<tr>
<td>Marine Pollutant</td>
<td>Yes Symbol (fish and tree).</td>
<td></td>
</tr>
<tr>
<td>Special Precautions for User</td>
<td>Warning: Corrosive substances.</td>
<td></td>
</tr>
<tr>
<td>Danger Code (Kemler)</td>
<td>80</td>
<td></td>
</tr>
<tr>
<td>EMS Number</td>
<td>F-A, S-B</td>
<td></td>
</tr>
<tr>
<td>Segregation Groups</td>
<td>Alkalis</td>
<td></td>
</tr>
<tr>
<td>Stowage</td>
<td>Category A.</td>
<td></td>
</tr>
<tr>
<td>Stowage Code</td>
<td>SW2 Clear of living quarters.</td>
<td></td>
</tr>
</tbody>
</table>
Section 14. Transport Information  cont’d.

Transport in Bulk
According to Annex II of MARPOL73/78 and the IBC Code

Transport/Additional Information
DOT
: Not applicable.

ADR
Excepted Quantities (EQ)
: Code: E1
Maximum net quantity per inner packaging: 30 ml
Maximum net quantity per outer packaging: 1000 ml

U.S. Domestic Ground Shipments
: Same as listed for Standard Shipments above.

U.S. Domestic Ground Non-Bulk (119 Gal or Less Per Container) Shipments
: Same as listed for Standard Shipments above.

Emergency Response Guide (ERG) Number
: Not determined.

IMDG
Limited Quantities (LQ)
: 5L

Excepted Quantities (EQ)
: Code: E1
Maximum net quantity per inner packaging: 30 ml
Maximum net quantity per outer packaging: 1000 ml

UN “Model Regulation”
: UN 1760 CORROSIVE LIQUIDS, N.O.S. (NONYLPHENOL), 8, III, ENVIRONMENTALLY HAZARDOUS

Section 15. Regulatory Information

SAFETY, HEALTH AND ENVIRONMENTAL REGULATIONS/LEGISLATION SPECIFIC FOR THE SUBSTANCE OR MIXTURE

SARA
: Section 355 (extremely hazardous substances): None of the ingredient is listed.

Section 313 (Specific toxic chemical listings): This product may contain 1 or more toxic chemicals subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act (SARA) of 1986 and 40 CFR part 372. If so, the chemicals are listed below.

<table>
<thead>
<tr>
<th>Dangerous Component</th>
<th>CAS No.</th>
<th>Weight %</th>
</tr>
</thead>
<tbody>
<tr>
<td>nonylphenol</td>
<td>104-40-5</td>
<td>&lt;20%</td>
</tr>
</tbody>
</table>
Section 15. Regulatory Information

**TSCA (Toxic Substances Control Act)**

<table>
<thead>
<tr>
<th>Dangerous Component</th>
<th>CAS No.</th>
<th>Active</th>
</tr>
</thead>
<tbody>
<tr>
<td>calcium carbonate</td>
<td>471-34-1</td>
<td>Active</td>
</tr>
<tr>
<td>nonylphenol</td>
<td>104-40-5</td>
<td>Active</td>
</tr>
<tr>
<td>m-phenylenebis(methylamine)</td>
<td>1477-55-0</td>
<td>Active</td>
</tr>
<tr>
<td>Quartz (SiO2)</td>
<td>14808-60-7</td>
<td>Active</td>
</tr>
<tr>
<td>Magnesite</td>
<td>546-93-0</td>
<td>Active</td>
</tr>
<tr>
<td>cyclohex-1,2-ylenediamine</td>
<td>694-83-7</td>
<td>Active</td>
</tr>
<tr>
<td>Distillates (petroleum), hydrotreated light paraffinic</td>
<td>64742-55-8</td>
<td>Active</td>
</tr>
<tr>
<td>Ferric Oxide</td>
<td>12227-89-3</td>
<td>Active</td>
</tr>
<tr>
<td>hexamethylenediamine</td>
<td>124-09-4</td>
<td>Active</td>
</tr>
<tr>
<td>3-amminopropan-1-ol</td>
<td>156-87-6</td>
<td>Active</td>
</tr>
<tr>
<td>tetramethylenediamine</td>
<td>110-60-1</td>
<td>Active</td>
</tr>
<tr>
<td>2-methylpentane-1,5-diamine</td>
<td>15520-10-2</td>
<td>Active</td>
</tr>
<tr>
<td>Siloxanes and Silicones, di-Me</td>
<td>63148-62-9</td>
<td>Active</td>
</tr>
</tbody>
</table>

**Hazardous Air Pollutants**

: None of the ingredients is listed.

**Proposition 65**

: **Chemicals known to the State of California (Prop. 65) to cause cancer:**
  14808-60-7 Quartz (SiO2)

: **Chemicals known to cause reproductive toxicity for females:**
  None of the ingredients is listed.

: **Chemicals known to cause reproductive toxicity for males:**
  None of the ingredients is listed.

: **Chemicals known to cause developmental toxicity:**
  None of the ingredients is listed.

**CANCEROGENICITY CATEGORIES**

**EPA (Environmental Protection Agency)**

: None of the ingredients is listed.

**TLV (Threshold Limit Value Established by ACGIH)**

: 14808-60-7 Quartz (SiO2) A2

**MAK (German Maximum Workplace Concentration)**

: 14808-60-7 Quartz (SiO2) 1

**NIOSH-Ca (National Institute for Occupational Safety and Health)**

: 14808-60-7 Quartz (SiO2)
Section 15. Regulatory Information  cont’d.

GHS Label Elements : The product is classified and labeled according to the Globally Harmonized System (GHS).

Hazard Pictograms : 

```
GHS05  GHS07  GHS08
```

Signal Word : Danger

Hazard-Determining Components of Labeling : m-phenylenebis(methylamine) cyclohex-1,2-ylendiamine

Hazard Statements : Harmful if inhaled.
Causes severe skin burns and eye damage.
May cause an allergic skin reaction.
Suspected of damaging fertility or the unborn child.
Harmful to aquatic life.
Harmful to aquatic life with long lasting effects.

Precautionary Statements : Do not breathe dusts or mists.
If on skin (or hair): Take off immediately all contaminated clothing.
Rinse skin with water/shower.
If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Immediately call a POISON CENTER/doctor. Store locked up. Dispose of contents/container in accordance with local/regional/national/international regulations.

NATIONAL REGULATIONS

Water Hazard Class : Water hazard class 3 (Self-assessment): extremely hazardous for water.

Chemical Safety Assessment : A Chemical Safety Assessment has not been carried out.
Section 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.

| Department Issuing SDS                  | Environmental, Health & Safety Department |
| Contact                                | Environmental, Health & Safety Manager   |
| Date of Preparation / Last Revision    | 5/01/2020                                 |

Abbreviations and Acronyms

- ADR: Accord européen sur le transport des marchandises dangereuses par Route (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
- ACGIH: American Conference of Governmental Industrial Hygienists
- EINECS: European Inventory of Existing Commercial Chemical Substances
- ELINCS: European List of Notified Chemical Substances
- CAS: Chemical Abstracts Service (division of the American Chemical Society)
- NFPA: National Fire Protection Association (USA)
- HMIS: Hazardous Materials Identification System (USA)
- LC50: Lethal concentration, 50 percent
- LD50: Lethal dose, 50 percent
- PBT: Persistent, Bioaccumulative and Toxic
- vPvB: very Persistent and very Bioaccumulative
- NIOSH: National Institute for Occupational Safety
- OSHA: Occupational Safety & Health
- TLV: Threshold Limit Value
- PEL: Permissible Exposure Limit
- REL: Recommended Exposure Limit
- Acute Tox. 4: Acute toxicity, Hazard Category 4
- Skin Corr. 1C: Skin corrosion/irritation, Hazard Category 1C
- Eye Dam. 1: Serious eye damage/eye irritation, Hazard Category 1
- Skin Sens. 1: Sensitisation - Skin, Hazard Category 1
- Repr. 2: Reproductive toxicity, Hazard Category 2
- Aquatic Acute 3: Hazardous to the aquatic environment - acute aquatic hazard - Category 3
- Aquatic Chronic 3: Hazardous to the aquatic environment - long-term aquatic hazard - Category 3