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DSB Installation Sheet

**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)  
4-nonylphenol, branched  
cyclohex-1,2-ylenediamine  
hexamethylenediamine

**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.



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## Section 2. Hazards Identification *cont'd.*

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.

Dangerous Component	CAS No.	Weight %
m-phenylenebis(methylamine)	1477-55-0	10-25%
calcium carbonate	471-34-1	50-75%
Quartz (SiO <sub>2</sub> )	14808-60-7	≤ 5%
cyclohex-1,2-ylenediamine	694-83-7	≤ 1%
Distillates (petroleum), hydrotreated light paraffinic	64742-55-8	≤ 1%

**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 and to be sure call for a doctor.  
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.

**After Skin Contact** : Immediately wash with water and soap and rinse thoroughly.  
Immediately rinse with water.  
If skin irritation continues, consult a doctor.

## Section 4. First Aid Measures *cont'd.*

**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** : CO<sub>2</sub>, 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.

## Section 6. Accidental Release Measures

**Person-Related Safety Precautions** : Wear protective equipment. Keep unprotected persons away.

**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 6. Accidental Release Measures *cont'd.***

**Protective Action Criteria for Chemicals**

PAC-1		
471-34-1	calcium carbonate	45 mg/m3
14808-60-7	Quartz (SiO2)	0.075 mg/m3
546-93-0	Magnesite	45 mg/m3
694-83-7	cyclohex-1,2-ylenediamine	2.1 mg/m3
156-87-6	3-aminopropan-1-ol	8.3 mg/m3
63148-62-9	Siloxanes and Silicones, di-Me	65 mg/m3
PAC-2		
471-34-1	calcium carbonate	210 mg/m3
14808-60-7	Quartz (SiO2)	33 mg/m3
546-93-0	Magnesite	260 mg/m3
694-83-7	cyclohex-1,2-ylenediamine	23 mg/m3
156-87-6	3-aminopropan-1-ol	91 mg/m3
63148-62-9	Siloxanes and Silicones, di-Me	720 mg/m3
PAC-3		
471-34-1	calcium carbonate	1,300 mg/m3
14808-60-7	Quartz (SiO2)	200 mg/m3
546-93-0	Magnesite	1,600 mg/m3
694-83-7	cyclohex-1,2-ylenediamine	140 mg/m3
156-87-6	3-aminopropan-1-ol	550 mg/m3
63148-62-9	Siloxanes and Silicones, di-Me	4,300 mg/m3

**Section 7. Handling and Storage**

- Information on 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.
- 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.



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## 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.

### 471-34-1 calcium carbonate

PEL Long-term value	: 15* 5** mg/m <sup>3</sup> *total dust **respirable fraction
REL Long-term value	: 10* 5** mg/m <sup>3</sup> *total dust **respirable fraction
TLV	: TLV withdrawn

### 1477-55-0 m-phenylenebis(methylamine)

REL	: Ceiling limit value: 0.1 mg/m <sup>3</sup> Skin
TLV	: Ceiling limit value: 0.1 mg/m <sup>3</sup> Skin

### 14808-60-7 Quartz (SiO<sub>2</sub>)

PEL	: See Quartz listing
REL Long-term value	: 0.05* mg/m <sup>3</sup> *respirable dust; See Pocket Guide App. A
TLV Long-term value	: 0.025* mg/m <sup>3</sup> *as respirable fraction

### 546-93-07 Magnesite

PEL Long-term value	: 15* 5** mg/m <sup>3</sup> *total dust **respirable fraction
REL Long-term value	: 10* 5** mg/m <sup>3</sup> *total dust **respirable fraction
TLV	: TLV withdrawn

**Additional information:** The lists that were valid during the creation were used as basis.

## 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  
Do not inhale gases / fumes / aerosols.  
Avoid contact with the eyes and skin.

**Breathing Equipment** : Use suitable respiratory protective device when high concentrations are present.  
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.

## Section 8. Exposure Controls/Personal Protection

### Protection of Hands



Protective gloves.

#### Material of Gloves:

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and therefore has to be checked prior to the application.

#### Penetration time of glove material:

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

### Eye Protection

: Wear appropriate eye protection to prevent eye contact.

## Section 9. Physical and Chemical Properties

<b>Form</b>	: Liquid
<b>Color</b>	: Grey
<b>Odor</b>	: Distinctive
<b>Odor Threshold</b>	: Not determined.
<b>pH-Value</b>	: Not determined.
<b>Melting Point/Melting Range</b>	: Undetermined
<b>Boiling Point/Boiling Range</b>	: Undetermined
<b>Flash Point</b>	: >94 °C (>201 °F)
<b>Flammability (Solid, Gaseous)</b>	: Not applicable.
<b>Ignition Temperature</b>	: 370 °C (698 °F)
<b>Decomposition Temperature</b>	: Not determined.
<b>Auto Igniting</b>	: Product is not self-igniting.
<b>Danger of Explosion</b>	: Product does not present an explosion hazard.
<b>Explosion Limits</b>	: <b>Lower:</b> 1.0 Vol % <b>Upper:</b> 10.5 Vol %
<b>Vapor Pressure</b>	: 20 °C (68 °F): 0.1 hPa
<b>Density at 20 °C (68 °F)</b>	: 1.776 g/cm <sup>3</sup> (14.821 lbs/gal)
<b>Relative Density</b>	: Not determined.
<b>Vapor Density</b>	: Not determined.
<b>Evaporation Rate</b>	: Not determined.
<b>Solubility In / Miscibility with Water</b>	: Not miscible or difficult to mix.

## Section 9. Physical and Chemical Properties *cont'd.*

Partition Coefficient (n-octanol/water)	: Not determined.
Viscosity	: <b>Dynamic:</b> Not determined. <b>Kinematic:</b> Not determined.
Solvent Content	: <b>Organic solvents:</b> 0.0 % <b>Solids content:</b> 100.0 %
Other Information	: No further relevant information available.
Volatile Organic Compounds	: Not determined.

## Section 10. Stability and Reactivity

Reactivity	: No decomposition if stored and applied as directed.
Chemical Stability	: No decomposition if stored and applied as directed.
Thermal Decomposition / Conditions to be Avoided	: No decomposition if used according to specifications.
Possibility of Hazardous Reactions	: No dangerous reactions known.
Conditions to Avoid	: Keep away from heat and sources of ignition.
Incompatible Materials	: No further relevant information available.
Hazardous Decomposition Products	: No dangerous decomposition products known.

## 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)

##### 25154-52-3 nonylphenol

Oral	LD50	1620 mg/kg (rat)
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##### 124-09-4 hexamethylenediamine

Oral	LD50	750 mg/kg (rat)
Dermal	LD50	1110 mg/kg (rabbit)

Primary Irritant Effect	: <b>On the Skin:</b> May cause skin irritation. <b>On the Eye:</b> Strong caustic effect.
Sensitization	: No sensitizing effects known.
Additional Toxicological Information	: The product shows the following dangers according to internally approved calculation methods for preparations: Corrosive Swallowing will lead to a strong caustic effect on mouth and throat and to the danger of perforation of esophagus and stomach.

## Section 11. Toxicological Information *cont'd.*

### CARCINOGENIC CATEGORIES

<b>IARC (International Agency for Research on Cancer)</b>	: 14808-60-7 Quartz (SiO <sub>2</sub> )
<b>NTP (National Toxicology Program)</b>	: 14808-60-7 Quartz (SiO <sub>2</sub> )
<b>OSHA-Ca (Occupational Safety &amp; Health Administration)</b>	: None of the ingredients is listed.

## Section 12. Ecological Information

### Toxicity

<b>Aquatic Toxicity</b>	: No further relevant information available.
<b>Persistence and Degradability</b>	: No further relevant information available.

### Behavior in Environmental Systems:

<b>Bioaccumulative Potential</b>	: No further relevant information available.
<b>Mobility in Soil</b>	: No further relevant information available.

### Additional Ecological Information:




<b>General Notes</b>	: <b>Water hazard class 1 (Self-assessment):</b> slightly hazardous for water Must not reach bodies of water or drainage ditch undiluted or unneutralized.
<b>Results of PBT and vPvB Assessment</b>	: <b>PBT:</b> Not applicable. <b>vPvB:</b> Not applicable.
<b>Other Adverse Effects</b>	: No further relevant information available.

## Section 13. Disposal Considerations

<b>Waste Treatment Methods Recommendation</b>	: 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.
<b>Uncleaned Packaging Recommendation</b>	: Disposal must be made according to federal, state, and local regulations.



**Section 14. Transport Information**

<b>UN-Number</b>	
<b>DOT, ADR, IMDG, IATA</b>	: UN1760
<b>UN Proper Shipping Name</b>	
<b>DOT, IATA</b>	: Corrosive liquids, n.o.s. (nonylphenol).
<b>ADR 1760</b>	: Corrosive liquids, n.o.s. (nonylphenol); ENVIRONMENTALLY HAZARDOUS
<b>IMDG</b>	: CORROSIVE LIQUID, N.O.S. (nonylphenol), MARINE POLLUTANT.
<b>Transport Hazard Class(es)</b>	:
<b>DOT</b>	 <p><b>Class:</b> 8 Corrosive substances. <b>Label:</b> 8</p>
<b>ADR, IATA</b>	 <p><b>Class:</b> 8 Corrosive substances. <b>Label:</b> 8</p>
<b>IMDG</b>	 <p><b>Class:</b> 8 Corrosive substances. <b>Label:</b> 8</p>
<b>Packing Group</b>	
<b>DOT, ADR, IMDG, IATA</b>	: III
<b>Environmental Hazards</b>	
<b>Marine Pollutant</b>	: No Symbol (fish and tree).
<b>Special Precautions for User</b>	: <b>Warning:</b> Corrosive substances.
<b>Danger Code (Kemler)</b>	: 80
<b>EMS Number</b>	: F-A,S-B
<b>Segregation Groups</b>	: Alkalis
<b>Stowage</b>	: Category A.
<b>Stowage Code</b>	: SW2 Clear of living quarters.

## Section 14. Transport Information *cont'd.*

**Transport in Bulk** : Not applicable.  
**According to Annex II of MARPOL73/78 and the IBC Code**

### Transport/Additional Information

#### 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** : 153

### IMDG

**Limited Quantities (LQ) Code** : 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


**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.

Dangerous Component	CAS No.	Weight %
nonylphenol	104-40-5	10-25%

## Section 15. Regulatory Information cont'd.

<b>TSCA (Toxic Substances Control Act)</b>	: All ingredients are listed.
<b>Proposition 65</b>	: <b>Chemicals known to the State of California (Prop. 65) to cause cancer:</b> 14808-60-7 Quartz (SiO <sub>2</sub> )
	<b>Chemicals known to cause reproductive toxicity for females:</b> None of the ingredients is listed.
	<b>Chemicals known to cause reproductive toxicity for males:</b> None of the ingredients is listed.
	<b>Chemicals known to cause developmental toxicity:</b> None of the ingredients is listed.

### CANCEROGENITY CATEGORIES

<b>EPA (Environmental Protection Agency)</b>	: None of the ingredients is listed.
<b>TLV (Threshold Limit Value Established by ACGIH)</b>	: 14808-60-7 Quartz (SiO <sub>2</sub> ) A2
<b>MAK (German Maximum Workplace Concentration)</b>	: 14808-60-7 Quartz (SiO <sub>2</sub> ) 1
<b>NIOSH-Ca (National Institute for Occupational Safety and Health)</b>	: 14808-60-7 Quartz (SiO <sub>2</sub> )
<b>GHS Label Elements</b>	: The product is classified and labeled according to the Globally Harmonized System (GHS).
<b>Hazard Pictograms</b>	: 
<b>Signal Word</b>	: Danger
<b>Hazard-Determining Components of Labeling</b>	: m-phenylenebis(methylamine) 4-nonylphenol, branched cyclohex-1,2-ylenediamine hexamethylenediamine
<b>Hazard Statements</b>	: 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.
<b>Precautionary Statements</b>	: Do not breathe dusts or mists. <b>If on skin (or hair):</b> Take off immediately all contaminated clothing. Rinse skin with water/shower. <b>If in eyes:</b> Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. <b>Immediately call a POISON CENTER/doctor.</b> Store locked up. Dispose of contents/container in accordance with local/regional/national/international regulations.

## Section 15. Regulatory Information cont'd.

### 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** : 7/27/2018
- 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