# WHMIS MATERIAL SAFETY DATA SHEET

| **SECTION 1 - Product Identification and Use** | | | Date : **6 October, 2000** |
|---|---|---|---|
| Product identifier : **BELZONA® 1341 (SUPERMETALGLIDE) BASE - NSF GRADE** | | | PIN/UN No: **Not applicable** |
| Product use : **Repair of Machinery and Equipment** | | | WHMIS classification : **D2B,E** |
| Manufacturer's name & address :<br>**BELZONA POLYMERICS Ltd.,**<br>Claro Road, Harrogate, Yorkshire,<br>HG1 4AY, United Kingdom.<br>Emergency telephone number :<br>U.K. -44-1423-503218 | Supplier's name & address :<br>**BELZONA Inc.,**<br>2000 N.W. 88 Court,<br>America's Gateway Park,<br>Miami, Florida 33172,<br>United States. | Supplier's emergency telephone numbers :<br>(Spill, Leak, Fire, Exposure or Accident)<br>800 424 9300 - Toll free in Canada<br>202 483 7616<br>Information telephone number :<br>305 594 4994 - Working hours only | |

**SECTION 2 - Hazardous Ingredients**

| Hazardous Ingredients | Approximate Concentration | CAS Numbers | Exposure Limits | $LD_{50}/LC_{50}$ Species and Route |
|---|---|---|---|---|
| **Isophoronediamine** | **7-13%** | **2855-13-2** | **Not available** | **Oral $LD_{50}$ 1030 mg/kg rat** |
| **Benzyl alcohol** | **10-30%** | **100-51-6** | **Not available** | **Oral $LD_{50}$ 1230 mg/kg rat** |
| **Cycloaliphatic amine preparation** | **7-13%** | **Not available** | **Not available** | **Not available** |
| **Amorphous silica** | **1-5%** | **7631-86-9** | **Not available** | **Not available** |

**SECTION 3 - Physical Data**

| | | |
|---|---|---|
| Physical state : **Thixotropic liquid** | Appearance/Odour : **Grey or blue/amine** | Odour threshold(ppm) : **Not applicable** |
| Vapour pressure (mm Hg) : **Not available** | Vapour density (Air = 1) : **>1** | Boiling point (°C) : **>150** |
| pH : **Not applicable** | Specific gravity : **1.6** | Coefficient water/oil : **Not applicable** |
| Freezing point (°C) : **Not available** | Solubility in water (20°C) : **Negligible** | Evaporation rate (relative to n-Butyl Acetate) : **Not applicable** |

**SECTION 4 - Fire and Explosion Data**

| | | |
|---|---|---|
| Flammability :<br>If yes, under which conditions : | **Not flammable but combustible.** | |
| Means of extinction : | **Water fog, foam, carbon dioxide, dry chemical.** | |
| Special procedures : | **Wear protective clothing and use self-contained breathing apparatus. Full bunker gear should be worn in extreme cases. Use sand to contain burning material.** | |
| Flash point and method :<br>**> 93°C Closed Cup** | Explosion limits (% by volume) :<br>Lower : **Not available** Upper : **Not available** | Autoignition temp (°C) :<br>**Not available** |
| Hazardous combustion products :<br>**Gaseous combinations of carbon, hydrogen, oxygen and nitrogen** | | |
| Explosion data - Sensitivity to impact :<br>**Not applicable** | Explosion data - Sensitivity to static discharge :<br>**Not available** | |

**SECTION 5 - Reactivity Data**

| | |
|---|---|
| Chemical stability :<br>If no, under which conditions : | **Yes** |
| Incompatibility to other substances :<br>If yes, which ones : | **Yes**<br>**Strong oxidizing agents, epoxy resins and isocyanates, under uncontrolled conditions.** |
| Reactivity and under what conditions : | **Not applicable** |
| Hazardous decomposition products : | **See hazardous combustion products above** |

Product identifier : **BELZONA® 1341 (SUPERMETALGLIDE) BASE - NSF GRADE**

**SECTION 6 - Toxicological Properties of Product**

Route of entry :
Skin contact : √ Skin absorption : Eye contact : √ Inhalation acute : √ Inhalation chronic : Ingestion : √

Effects of acute exposure to product : **Causes burns. Harmful by inhalation, in contact with skin and if swallowed.**

Effects of chronic exposure to product : **None known.**

| $LD_{50}$ of product (species and route) : | Irritancy of product : | Exposure limits of product : |
|---|---|---|
| **Not available** | **Extreme on skin/eyes** | **Not available** |
| $LC_{50}$ of product (species and route) : | Sensitization to product : | Synergistic materials : |
| **Not available** | **Skin, on repeated contact** | **Not available** |

Carcinogenicity : **N.av*** Reproductive effects : **N.av*** Teratogenicity : **N.av*** Mutagenicity : **N.av***

*** Not available for the mixture, however available information on the individual components does not indicate any chronic exposure hazard other than that stated above.**

**SECTION 7 - Preventative Measures**

| Personal protective equipment : | Gloves : | Eye : |
|---|---|---|
| | **Use neoprene or nitrile** | **Goggles/faceshield** |
| Footwear : | Respiratory (protection required if exposure > TLV) : | Clothing : |
| **Industrial boots** | **NIOSH organic vapour** | **Overalls** |

Other :

| | |
|---|---|
| Engineering controls : | **Where adequate natural ventilation is not available provide suitable local exhaust ventilation.** |
| Leak and spill procedures : | **Contain with an inert material (e.g. earth or sand). Sweep up and place into suitable covered, labelled containers. Flush area with detergent and water.** |
| Waste disposal : | **In accordance with Federal, Provincial and Local Regulations.** |
| Handling procedures : | **Avoid contact with skin and eyes.** |
| Storage requirements : | **Keep in a cool, well ventilated place, in the original containers.** |

**SECTION 8 - First Aid Measures**

| | |
|---|---|
| Skin : | **After contact with skin, wash immediately with plenty of soap and water.** |
| Eye : | **In case of contact with eyes, rinse immediately with plenty of water and seek medical advice if any irritation persists.** |
| Inhalation : | **If symptoms are experienced, remove source of contamination or move victim to fresh air. Obtain medical attention immediately if recovery is delayed.** |
| Ingestion : | **Do not induce vomiting. Immediately rinse the mouth with water. Drink plenty of water (1 pint/600 mls). Seek medical attention promptly.** |
| General advice : | **When using do not eat, drink or smoke. Take off immediately all contaminated clothing and launder before reuse. Wash hands thoroughly after handling this product.** |

**SECTION 9 - Preparation Date of MSDS**

Additional information : **Replaces previous issue dated 7 October 1997**

| Prepared by : | Phone number : | Date : |
|---|---|---|
| **N.A.Robinson** | **U.K. -44-1423-567641** | **6 October, 2000** |

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| **SECTION 1 - Product Identification and Use** | | | Date : **6 October, 2000** |
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| Product identifier : **BELZONA® 1341 (SUPERMETALGLIDE) SOLIDIFIER - NSF GRADE** | | | PIN/UN No : **Not applicable** |
| Product use : **Repair of Machinery and Equipment** | | | WHMIS classification : **D2B** |
| Manufacturer's name & address :<br>**BELZONA POLYMERICS Ltd.,**<br>Claro Road, Harrogate, Yorkshire,<br>HG1 4AY, United Kingdom.<br>Emergency telephone number :<br>U.K. -44-1423-503218 | Supplier's name & address :<br>**BELZONA Inc.,**<br>2000 N.W. 88 Court,<br>America's Gateway Park,<br>Miami, Florida 33172,<br>United States. | | Supplier's emergency telephone numbers :<br>(Spill, Leak, Fire, Exposure or Accident)<br>800 424 9300 - Toll free in Canada<br>202 483 7616<br>Information telephone number :<br>305 594 4994 - Working hours only |

**SECTION 2 - Hazardous Ingredients**

| Hazardous Ingredients | Approximate Concentration | CAS Numbers | Exposure Limits | $LD_{50}/LC_{50}$ Species and Route |
|---|---|---|---|---|
| **Epoxy resin (number average molecular weight <=700)** | **60-100%** | **25068-38-6** | **Not available** | **Oral $LD_{50}$ >2000 mg/kg rat** |
| | | | | |

**SECTION 3 - Physical Data**

| | | |
|---|---|---|
| Physical state : **Viscous liquid** | Appearance/Odour : **Clear/epoxy** | Odour threshold(ppm) : **Not applicable** |
| Vapour pressure (mm Hg) : **0.01 @ 25°C** | Vapour density (Air = 1) : **Not applicable** | Boiling point (°C) : **Not available** |
| pH : **Not applicable** | Specific gravity : **1.16** | Coefficient water/oil : **Not applicable** |
| Freezing point (°C) : **Not available** | Solubility in water (20°C) : **Negligible** | Evaporation rate (relative to n-Butyl Acetate) : **Not applicable** |

**SECTION 4 - Fire and Explosion Data**

| | | |
|---|---|---|
| Flammability : **Not flammable but combustible**<br>If yes, under which conditions : | | |
| Means of extinction : **Water fog, foam, carbon dioxide, dry chemical.** | | |
| Special procedures : **Wear protective clothing and use self-contained breathing apparatus. Full bunker gear should be worn in extreme cases. Use sand to contain burning material.** | | |
| Flash point and method : **> 240°C Closed Cup** | Explosion limits (% by volume) :<br>Lower : **Not available** Upper : **Not available** | Autoignition temp (°C) : **Not available** |
| Hazardous combustion products :<br>**Gaseous combinations of carbon, hydrogen and oxygen** | | |
| Explosion data - Sensitivity to impact :<br>**Not applicable** | Explosion data - Sensitivity to static discharge :<br>**Not available** | |

**SECTION 5 - Reactivity Data**

| | |
|---|---|
| Chemical stability : **Yes**<br>If no, under which conditions : | |
| Incompatibility to other substances : **Yes**<br>If yes, which ones : | **Strong oxidizing agents, acids, bases, amines** |
| Reactivity and under what conditions : | **Not applicable** |
| Hazardous decomposition products : | **See hazardous combustion products above** |

Product identifier : **BELZONA® 1341 (SUPERMETALGLIDE) SOLIDIFIER - NSF GRADE**

**SECTION 6 - Toxicological Properties of Product**

Route of entry :
Skin contact : √ Skin absorption : Eye contact : √ Inhalation acute : Inhalation chronic : Ingestion : √

Effects of acute exposure to product : **None known.**

Effects of chronic exposure to product : **None known.**

| $LD_{50}$ of product (species and route) : | Irritancy of product : | Exposure limits of product : |
|---|---|---|
| **Not available** | **Moderate to extreme on skin/eyes** | **Not available** |
| $LC_{50}$ of product (species and route) : | Sensitization to product : | Synergistic materials : |
| **Not available** | **Skin, on repeated contact** | **Not available** |

Carcinogenicity : **N.ap** Reproductive effects : **N.ap** Teratogenicity : **N.ap** Mutagenicity : **N.ap**

**SECTION 7 - Preventative Measures**

| Personal protective equipment : | Gloves : **Use neoprene or nitrile** | Eye : **Goggles/faceshield** |
|---|---|---|
| Footwear : **Industrial boots** | Respiratory (protection required if exposure > TLV) : | Clothing : **Overalls** |

Other :

| | |
|---|---|
| Engineering controls : | **Provide adequate cross air circulation.** |
| Leak and spill procedures : | **Contain with an inert material (e.g. earth or sand). Sweep up and place into suitable covered, labelled containers. Flush area with detergent and water.** |
| Waste disposal : | **In accordance with Federal, Provincial and Local Regulations.** |
| Handling procedures : | **Avoid contact with skin and eyes.** |
| Storage requirements : | **Keep in a cool, well ventilated place, in the original containers.** |

**SECTION 8 - First Aid Measures**

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| Skin : | **After contact with skin, wash immediately with plenty of soap and water.** |
| Eye : | **In case of contact with eyes, rinse immediately with plenty of water and seek medical advice if any irritation persists.** |
| Inhalation : | **If symptoms are experienced, remove source of contamination or move victim to fresh air. Obtain medical attention immediately if recovery is delayed.** |
| Ingestion : | **Do not induce vomiting. Immediately rinse the mouth with water. Drink plenty of water (1 pint/600 mls). Seek medical attention promptly.** |
| General advice : | **When using do not eat, drink or smoke. Take off immediately all contaminated clothing and launder before reuse. Wash hands thoroughly after handling this product.** |

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