# WHMIS MATERIAL SAFETY DATA SHEET

| **SECTION 1 - Product Identification and Use** | | | Date : **23 October, 2000** |
|---|---|---|---|
| Product identifier : **BELZONA® 3111 (FLEXIBLE MEMBRANE)** | | | PIN/UN No : **Not applicable** |
| Product use : **Repair and reclamation** | | | WHMIS classification : **D2A** |
| 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 |
|---|---|---|---|---|
| **Quartz** | **10-30%** | **14808-60-7** | **ACGIH (TWA) TLV 0.05 mg/m$^3$ (R)** | **Not available** |
| **Zinc oxide** | **1-5%** | **1314-13-2** | **ACGIH (TWA) TLV 10 mg/m$^3$** | **Oral $LD_{50}$ 7950mg/kg mouse** |

**(R) Denotes respirable fraction. The quartz contained within this product is very unlikely to be a risk due to physical form (see Section 3)**

**SECTION 3 - Physical Data**

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| Physical state : **Emulsion** | Appearance/Odour : **Grey or white/ammonia** | Odour threshold(ppm) : **Not available** |
| Vapour pressure (mm Hg) : **17.9 @ 20°C** | Vapour density (Air = 1) : **>1** | Boiling point (°C) : **100** |
| pH : **9-10** | Specific gravity : **1.27** | Coefficient water/oil : **Not available** |
| Freezing point (°C) : **0** | Solubility in water (20°C) : **Miscible** | Evaporation rate (relative to n-Butyl Acetate) : **As water** |

**SECTION 4 - Fire and Explosion Data**

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| Flammability :<br>If yes, under which conditions : | **Not flammable. Combustible when dry.** | |
| 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>**Not applicable** | Explosion limits (% by volume) :<br>Lower : **Not applicable** Upper : **Not applicable** | Autoignition temp (°C) :<br>**Not applicable** |
| Hazardous combustion products : **Gaseous combinations of carbon, hydrogen, nitrogen, oxygen, sulphur & chlorine** | | |
| Explosion data - Sensitivity to impact :<br>**Not applicable** | Explosion data - Sensitivity to static discharge :<br>**Not applicable** | |

**SECTION 5 - Reactivity Data**

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| Chemical stability :<br>If no, under which conditions : | **Yes** |
| Incompatibility to other substances :<br>If yes, which ones : | **Yes**<br>**May coagulate or floculate if mixed with highly ionic solutions or organic solvents** |
| Reactivity and under what conditions : | **Not applicable** |
| Hazardous decomposition products : | **See hazardous combustion products above** |

Product identifier : **BELZONA® 3111 (FLEXIBLE MEMBRANE)**

**SECTION 6 - Toxicological Properties of Product**

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

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| Effects of acute exposure to product : **Irritating to eyes and skin.** | | |
| Effects of chronic exposure to product : **May cause irritation.** | | |
| $LD_{50}$ of product (species and route) : **Not available** | Irritancy of product : **Slight on skin/eyes** | Exposure limits of product : **Not available** |
| $LC_{50}$ of product (species and route) : **Not available** | Sensitization to product : **Not applicable** | Synergistic materials : **Not available** |

Carcinogenicity : √ Reproductive effects : **N.ap** Teratogenicity : **N.ap** Mutagenicity : **N.ap**
**√ Quartz is listed by ACGIH as 'A2' suspected human carcinogen. The risk is associated with the inhalation of the respirable dust fraction.**

**SECTION 7 - Preventative Measures**

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

Other :

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| 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. Do not breathe fumes/vapour/spray. If exposure to hazardous substances identified above cannot be controlled by any other practicable means, suitable respiratory protective equipment should be worn. Dry sanding, flame cutting and/or welding of the dry coating will give rise to dust and/or hazardous fumes. Wet sanding should be used wherever possible. If exposure cannot be avoided by the provision of local exhaust ventilation, suitable respiratory protective equipment should be worn.** |
| 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.** |

**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** | **23 October, 2000** |