

MATERIAL SAFETY DATA SHEET	
In compliance with OSHA 29 CFR 1910.1200	
N.ap means Not Applicable NIA means No Information Available	
PREPARED BY : N.A.ROBINSON	DATE PREPARED : 3 APRIL 2001
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BELZONA INC., 2000 N.W. 88 COURT, MIAMI, FL 33172	<b>EMERGENCY PHONE NUMBERS</b> (Spill, Leak, Fire, Exposure or Accident) 800 424 9300 - Toll free in United States 202 483 7616 - For calls from outside the United States <b>INFORMATION PHONE NUMBER</b> 305 594 4994 - Working hours only

### SECTION I - PRODUCT IDENTIFICATION

PRODUCT NUMBER : 1105/1321  
 PRODUCT NAME : Belzona® 1221 (Super E-Metal) Solidifier  
 PRODUCT CLASS : Polyisocyanate

### SECTION II - HAZARDOUS INGREDIENTS/TOXICOLOGICAL DATA

Hazardous Components	% by Weight	CAS Number	Exposure Limits			Toxicity		
			OSHA PEL mg/m <sup>3</sup>	ACGIH TLV ppm		LD <sub>50</sub> Oral mg/Kg	Dermal	LC <sub>50</sub> Inhal ppm
DGEBA-Epoxy Resin	1-5	25068-38-8	NIA	NIA	NIA	5000	2000	NIA
Hexamethylene-Diisocyanate (HDI)	0.1-1	822-06-0	NIA	NIA	0.005ppm	710	570	310-350mg/m <sup>3</sup>
Aliphatic poly-isocyanate	60-100	28182-81-2	NIA	NIA	NIA	NIA	NIA	NIA
Modified Silica	5-10	67762-90-7	N.ap	N.ap	N.ap	NIA	NIA	NIA

#### CARCINOGENICITY

No data is available for the mixture, however, none of the ingredients are listed as carcinogens by OSHA, NTP, ACGIH or IARC.

### SECTION III - PHYSICAL DATA

APPEARANCE AND ODOR : Off-white paste with slight odor.  
 BOILING POINT : >200°C  
 VAPOR PRESSURE : 0.05mm Hg @ 25°C  
 EVAPORATION RATE : NIA  
 SOLUBILITY IN WATER : Reacts

SPECIFIC GRAVITY : 1.21  
 VAPOR DENSITY : Heavier than air  
 % VOLATILE BY VOLUME : 1-5

### SECTION IV - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT : >165°C  
 TEST METHOD : Closed cup

EXPLOSION LIMITS  
 LOWER : NIA  
 UPPER : NIA

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OSHA FLAMMABILITY CLASS : N.ap  
FLAMMABILITY INDEX (NFPA) : 1 Slight  
REACTIVITY INDEX (NFPA) : 1 Slight  
HEALTH HAZARD (NFPA) : 2 Moderate  
EXTINGUISHING MEDIA : Use: sand, alcohol resistant foam, carbon dioxide, chemical powder, water fog for larger fires. Do NOT use water jet.

**SPECIAL FIRE FIGHTING PROCEDURES**

Wear protective clothing and use self-contained breathing apparatus to protect against inhalation of poisonous vapors and other decomposition/combustion products. Full bunker gear should be worn in extreme cases. Use sand to contain burning material.

**UNUSUAL FIRE AND EXPLOSION HAZARDS**

Decomposition and combustion products may be hazardous.

<b>SECTION V - HEALTH HAZARDS</b>
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ROUTE(S) OF ENTRY : Skin contact, skin absorption, eye contact, inhalation.

PRIME HAZARD(S) : Skin sensitizer. Irritant.

**EFFECTS OF EXPOSURE**

Acute : Irritating to eyes and skin.

Chronic : There is no data on the product itself. Prolonged or repeated contact with the skin or mucous membrane may result in irritant symptoms such as redness, blistering or dermatitis. Onset of symptoms may be delayed. Causes of allergic skin reaction have been observed.

**EMERGENCY AND FIRST AID PROCEDURES**

Inhalation : If symptoms are experienced, remove source of contamination and/or move victim to fresh air. If recovery is delayed or there are signs of distress obtain medical attention immediately.

Eye contact : Flush eyes with water for 15 minutes. Seek medical advice if any irritation persists.

Skin contact : Immediately remove excess with a clean cloth and wash skin thoroughly with soap and water. If irritation or inflammation persists, seek medical advice.

Ingestion : If swallowed, do not induce vomiting. Rinse mouth with water and drink plenty of water. Call TAMPA BAY Regional Poison Center (Tel.No.1-800-282-3171) and/or seek medical advice.

**MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE**

Persons with a history of skin sensitization problems should only be employed in processes in which this product is used under appropriate medical supervision.

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#### **SECTION VI - REACTIVITY DATA**

**STABILITY : Stable**

**STABILITY CONDITIONS TO AVOID : N.ap**

**INCOMPATIBILITY (MATERIALS TO AVOID CONTACT WITH)**

Water (Carbon dioxide evolved), strong oxidizers, alcohol or amines, under uncontrolled conditions.

**HAZARDOUS DECOMPOSITION PRODUCTS**

Gaseous combinations of carbon, hydrogen, nitrogen and oxygen may occur at elevated temperatures.

**HAZARDOUS POLYMERIZATION**

Hazardous polymerization will not occur when stored and used as directed.

**POLYMERIZATION CONDITIONS TO AVOID**

N.ap

#### **SECTION VII - SPILL AND LEAK PROCEDURES**

**SPILLAGE**

Absorb with a dry inert material (e.g. sand). Sweep up, place into suitable labelled containers, seal and dispose of properly. Flush area with dilute ammonium hydroxide or water-alcohol mixture.

**WASTE DISPOSAL METHODS**

Dispose of in accordance with Local, State and Federal Regulations.

#### **SECTION VIII - SPECIAL PROTECTION INFORMATION**

**PERSONAL PROTECTIVE MEASURES**

**RESPIRATORY :** In confined areas or where good natural/mechanical ventilation is not available, leading to a risk of exceeding the TLV's indicated, an appropriate NIOSH or MSHA approved respirator should be worn.

**SKIN :** Impermeable gloves, such as Neoprene or Nitrile. Wash hands with soap and water and use hand cream. Suitable protective clothing to minimize skin contact. Remove contaminated clothing and wash before reuse.

**EYE :** Safety glasses or goggles. Eyewash station.

**MECHANICAL PROTECTIVE MEASURES**

**VENTILATION :** Where adequate natural ventilation is not available provide suitable local exhaust ventilation.

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#### OTHER PROTECTIVE EQUIPMENT

- : Where there is a risk of contamination of footwear, safety boots should be worn and cleaned thoroughly before reuse. Cotton or cotton/synthetic overalls or coveralls are normally suitable. Grossly contaminated clothing should be removed and the skin washed with soap and water or a proprietary skin cleaner.

#### OTHER COMMENTS

- : Where machining or abrading of cured material leads to the production of respirable and/or nuisance dust, an appropriate NIOSH or MSHA approved respirator should be worn.

### SECTION IX - SAFE HANDLING AND STORAGE

#### HANDLING AND STORAGE PRECAUTIONS

##### HANDLING

Avoid breathing vapors and contact with skin and eyes.

##### STORAGE

Overheating may cause containers to rupture. Unopened containers should be stored under cool, dry conditions. Check all containers for leaks at regular intervals and before use.

#### HYGIENE PRACTICES

When using, do not eat, drink or smoke. Remove contaminated clothing and laundry before reuse. Wash hands with soap and water after handling this product.

### SECTION X - REGULATORY INFORMATION

#### SARA TITLE III - NOTIFICATION OF TOXIC CHEMICALS

None of the constituents of this product are subject to reporting requirements under section 313 of the Superfund Amendment and Reauthorization Act of 1986 (40 CFR Part 372).

#### DISCLAIMER

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