WHMIS MATERIAL SAFETY DATA SHEET

SECTION 1 - Product Identification and Use		Date : **6 December, 2000**
Product identifier : **BELZONA® 2911 (ELASTOMER QD CONDITIONER) - NEW FORMULATION**		PIN/UN No : **1193**
Product use : **Repair of Machinery and Equipment**		WHMIS classification : **D1B,D2A,D2B,B2**
Manufacturer's name & address : **BELZONA POLYMERICS Ltd.,** Claro Road, Harrogate, Yorkshire, HG1 4AY, United Kingdom. Emergency telephone number : U.K. -44-1423-503218	Supplier's name & address : **BELZONA Inc.,** 2000 N.W. 88 Court, America's Gateway Park, Miami, Florida 33172, United States.	Supplier's emergency telephone numbers : (Spill, Leak, Fire, Exposure or Accident) 800 424 9300 - Toll free in Canada 202 483 7616 Information telephone number : 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
Diphenylmethane diisocyanate (MDI)	**10-30%**	**101-68-8**	**ACGIH (TWA) TLV 0.005 ppm**	**Oral LD_{50} >10,000mg/kg (rat) IHL LC_{50} 178mg/m^3 (rat)**
Methyl Ethyl Ketone (MEK)	**60-100%**	**78-93-3**	**ACGIH (TWA) TLV 200 ppm**	**Oral LD_{50} 2740mg/kg (rat) IHL LC_{50} 11300mg/m^3/4H (rat)**

SECTION 3 - Physical Data

Physical state : **Liquid**	Appearance/Odour : **Clear brown/ketone**	Odour threshold(ppm) : **Not available**
Vapour pressure (mm Hg) : **71 @ 20°C**	Vapour density (Air = 1) : **>1**	Boiling point (°C) : **>80**
pH : **Not applicable**	Specific gravity : **0.90**	Coefficient water/oil : **Not available**
Freezing point (°C) : **Not applicable**	Solubility in water (20°C) : **Reacts**	Evaporation rate (relative to n-Butyl Acetate) : **Faster**

SECTION 4 - Fire and Explosion Data

Flammability : If yes, under which conditions :	**Highly flammable liquid and vapour. Vapours are heavier than air and may spread along floors. They may form explosive mixtures with air. Prevent the creation of flammable or explosive concentrations of vapour with air. The product should only be used in areas from which all naked lights and other sources of ignition have been excluded. Electrical equipment should be protected to the appropriate standard.**	
Means of extinction :	**Use: sand, alcohol resistant foam, carbon dioxide, chemical powder, water fog for larger fires. Do NOT use water jet.**	
Special procedures :	**Wear protective clothing and breathing apparatus. Use sand to contain burning materials.**	
Flash point and method : **2°C Closed cup**	Explosion limits (% by volume) : Lower : **1.8%** Upper : **12%**	Autoignition temp (°C) : **515**
Hazardous combustion products : **In a fire, hazardous decomposition products such as smoke, carbon monoxide, carbon dioxide, oxides of nitrogen, hydrogen cyanide, amines and alcohols may be produced.**		
Explosion data - Sensitivity to impact : **Not applicable**	Explosion data - Sensitivity to static discharge : **Not available**	

SECTION 5 - Reactivity Data

Chemical stability : If no, under which conditions :	**Yes**
Incompatibility to other substances : If yes, which ones :	**Yes** **Keep away from oxidising agents and strongly alkaline and strongly acidic materials.**
Reactivity and under what conditions :	**Uncontrolled exothermic reactions occur with amines and alcohols. The product reacts slowly with water resulting in evolution of carbon dioxide.**
Hazardous decomposition products :	**See hazardous combustion products above**

Product identifier : **BELZONA® 2911 (ELASTOMER QD CONDITIONER) - NEW FORMULATION**

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 :	**Toxic by inhalation. Toxic; Exposure to organic solvent vapours may result in adverse health effects such as irritation of the mucous membrane and the respiratory system and adverse effects on the renal and central nervous systems.**
Effects of chronic exposure to product :	**Very toxic; animal studies on methyl ethyl ketone a constituent of this product, indicated a possible reproductive hazard – may cause fetotoxicity. Diphenylmethane diisocyanate is listed by ACGIH as 'A3' –(Confirmed animal carcinogen with unknown relevance to humans).**

LD_{50} of product (species and route) : **Not available**	Irritancy of product : **Moderate to severe to eyes. Slight to moderate to skin/respiratory system.**	Exposure limits of product : **See section 2**
LC_{50} of product (species and route) : **>500mg/m^3/4H rat †**	Sensitization to product : **Respiratory and skin (MDI)**	Synergistic materials : **Not available**

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

† Equivalent LC_{50}, According to method described in Section 45 of the Controlled Products Regulations.

SECTION 7 - Preventative Measures

Personal protective equipment :	Gloves : **Nitrile or Neoprene or PVA**	Eye : **Goggles/faceshield**
Footwear : **Industrial boots**	Respiratory (protection required if exposure > TLV) : **Face mask with organic vapour/isocyanate canister**	Clothing : **Overalls**

Other :

Engineering controls :	**Where adequate natural ventilation is not available provide suitable local exhaust ventilation.**
Leak and spill procedures :	**Contain with a dry inert material (e.g. sand). Sweep up and place into suitable covered, labelled containers. Flush area with dilute ammonium hydroxide or alcohol/water.**
Waste disposal :	**In accordance with Federal, Provincial and Local Regulations.**
Handling procedures :	**Avoid contact with skin and eyes. Avoid breathing fumes/vapour.**
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 :

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