SECTION 1 IDENTIFICATION OF THE MATERIAL & SUPPLIER

MSDS Issue Date:	August 2005
Product Name:	Demilec A 500
Application:	Component A of urethane foam system
Supplier:	Insulfoam Solutions Pty Ltd 68 Pakington St Geelong West 3218 David Hazle 0352212577 / 0418510204
Emergency Telephone:	**0352212577 / 0418510204**

SECTION 2 HAZARDS IDENTIFICATION

Hazard Classification	Xn Harmful
Risk phrase(s)	R36/37/38 Irritating to eyes, respiratory system to skin R42 May cause sensitization by inhalation
Safety phrase(s)	S2 Keep our of reach of children S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice S28 After skin contact wash immediately with soap S38 In case of insufficient ventilation, wear suitable respiratory equipment S45 In case of accident or if you feel unwell seek advice immediately

This product is NOT a dangerous good.

This product is classified as Hazardous according to the criteria of NOHSC.

WARNING

Health:	Contact with this material will cause burns to the skin, eyes and mucous membranes. This product may cause an allergic skin reaction. Exposure may cause respiratory tract irritation. A hyper reactive response to even minimal concentrations may develop in sensitized persons. These sensitized persons should not be exposed to any mixtures containing unreacted MDI.
Environment:	Material contains a chemical which is a harmful to the environment. Dispose of waste material in accordance with EPA requirements

SECTION 3 COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS Number	Weight %	NOHSC TWA	NOHSC STEL	SKIN
Polymeric Diphenylmethane diisocyanate (Polymeric MDI)	9016-87-9	>60	0.02 mg/m^3	0.07 mg/m^3	Sensitizer
4,4-Diphenylmethane diisocyanate (4,4 MDI)	101-68-8	Approx 33	0.02 mg/m^3	0.07 mg/m^3	Sensitizer

SECTION 4 FIRST AID MEASURES

Inhalation:	**Move person to fresh air. Restore and support continued breathing. If breathing is difficult, give oxygen. Get immediate medical attention.**
Skin Contact:	**Flush contaminated skin with large amounts of water while removing contaminated clothing. Wash affected skin areas with soap and water. Get medical attention if symptoms occur.**
Eye Contact:	**Flush eyes immediately with large amounts of water for at least 15 minutes holding eyelids open while flushing. Get prompt medical attention.**
Ingestion:	**If swallowed, do not induce vomiting. Give victim one or two glasses of water or milk. Call a physician or poison control center immediately for further instructions. Never give anything by mouth to an unconscious person.**

SECTION 5 FIRE FIGHTING MEASURES

Extinguishing Media:	**Carbon Dioxide, Dry chemical, Foam, Water Fog**
Protection of Firefighters:	**Wear full firefighting protective clothing, including self-contained breathing apparatus (SCBA). If water is used, fog nozzles are preferable.**
HAZCHEM Code:	**None Established**
Hazardous Decomposition Products:	**Monomeric isocyanate, traces of hydrogen cyanide, nitrogen dioxide. Carbon monoxide, carbon dioxide.**

SECTION 6 ACCIDENTAL RELEASE MEASURES

Personal Precautions:	Avoid inhalation of vapors and contact with skin and eyes. Wear appropriate protective equipment & clothing during clean-up. Evacuate the area.
Environmental Precautions:	Do not allow the spilled product to enter public drainage system or open water courses.
Methods for Cleaning Up:	Bund (contain) the spilled material, where this is possible. Absorb the spilled material onto an inert, non flammable absorbent carrier (such as earth or sand) and scrape it up.

SECTION 7 HANDLING AND STORAGE

Handling:

Technical Measures:	No special precautions necessary.
Precautions and Advice for Safe Handling:	Keep closure tight and container upright to prevent leakage. Avoid skin and eye contact. Wash thoroughly after handling. Do not handle until all safety precautions have been read and understood. Empty containers should not be re-used. Use with adequate ventilation. When the product is sprayed or heated, an approved positive –pressure, supplied air respirator may be required.

Storage:

Technical Measures:	No special precautions necessary.
Storage Conditions:	Store only in well-ventilated areas. Keep container closed when not in use. Due to reaction with water, producing CO2 gas, a hazardous build-up of pressure could result if contaminated containers are re-sealed. Uncontaminated container may be resealed only after placing under a Nitrogen blanket. Do not store in containers made of copper, copper alloys, or galvanized surfaces.

SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

National exposure standards	0.02 mg/m^3 (due to isocyanate content) This limit does not apply to previously sensitized individuals.
Biological limit values	Not Established
Engineering controls	Sufficient ventilation in pattern and volume should be provided in order to maintain air contaminant levels below recommended exposure limits.
Personal protective equipment	Respiratory protection: This product contains isocyanates which have poor odor warning properties. If occupational exposure limits are exceeded, a NIOSH approved supplied-air respirator is required. Skin protection: Use neoprene, nitrile, or rubber gloves to prevent skin contact. Eye protection: Use safety eyewear including safety glasses with side shields and chemical goggles where splashing may occur. Other protective equipment: Use disposable or impervious clothing if work clothing contamination is likely. Remove and wash contaminated clothing before reuse. Use long-sleeved shirt to minimize skin exposure.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Brown Liquid
Odour	Very Slight, threshold 0.4ppm
pH	Not Applicable
Vapour Pressure	Approx' $4x10^{-6}$
Vapour Density	8.5 (air being 1)
Boiling point/range	Not Applicable
Freezing Point	Not Determined
Solubility	Reacts with water, soluble in most organic solvents
Specific Gravity or density	1.24
Information on Flammability	
Flash Point	218^0C
UEL	Not Available
LEL	Not Available
Additional Information	
Specific Heat Value	Not Applicable
Particle Size	Not Applicable
VOC Content	Not Available
Evaporation Rate	Not Available
Viscosity	Not Available
Percent volatile	Not Available
Octanol/Water Partition Coefficient	Not Available
Saturated vapour concentration	Not Available
Additional applicable Characteristics	None
Flame Propagation	Not Applicable
Other Properties that may contribute to the intensity of a fire	Not Available
Potential for Dust Explosion	None
Reactions that release flammable gases or vapours	Not Available
Fast or intensely burning characteristics	Not Available
Non-flammables that could contribute unusual hazards to a fire	None
Release of invisible flammable vapours and gases.	Not Available
Decomposition temperature	Not Available

SECTION 10 STABILITY AND REACTIVITY

Chemical stability	Product is stable under normal storage conditions.
Conditions to avoid	High temperatures and freezing
Incompatible materials	The product will react with any materials containing active hydrogens, eg water, alcohol, amines, bases, and acids
Hazardous decomposition products	Carbon monoxide, carbon dioxide Nitrogen Oxides, Hydrogen Cyanide
Hazardous reactions	Not Available

SECTION 11 TOXICOLOGICAL INFORMATION

PRODUCT LD50	(ORAL)	>5000mg/kg (rat)
	(DERMAL)	>5000mg/kg (rabbit)
PRODUCT LC50	(INHALATION)	=490mg/m3/4H (rat)

Chronic Effects	In the absence of prolonged exposure to high concentrations leading to chronic irritation and lung damage, it is highly unlikely that tumor formation (benign or malignant) will occur.
Carcinogenicity	The ingredients of this product are not classified as carcinogenic by NOHSC or ACGIH, not regulated as carcinogens by OSHA, and not listed as carcinogens by NTP.
Mutagenicity	There is no substantial evidence of mutagenic potential
Reproductive effects	No adverse reproductive effects are anticipated.
Teratogenicity and Fetotoxicity	No birth defects were seen in two independent animal (rat) studies. Fetotoxicity was observed at doses that were extremely toxic (including Lethal) to the mother. Fetotoxicity was not observed at doses that were not maternally toxic.

SECTION 12 ECOLOGICAL INFORMATION

Ecotoxicity	LC0 (Zebra Fish) > 1000mg/l EC50 (Dapnia Magna) (24 Hour) > 1000mg/l EC50 (E.coli) > 100mg/l
Persistence and degradability	Immiscible in water, but will react with water to produce inert and non-biodegradable solids
Mobility	Not Available
Additional information	
Environmental fate (exposure)	It is unlikely that significant environmental exposure in the air or water will arise, based on consideration of the production and use of the substance.
Bioaccumulative potential	Not Available

SECTION 13 DISPOSAL CONSIDERATIONS

Waste from Residues:	Dispose of waste material according to Local, State, and National Environmental Regulations.
Contaminated Packaging:	No available information.

SECTION 14 TRANSPORT INFORMATION

Australian Dangerous Goods Code	This product is not regulated as a dangerous good.
U.S. Department of Transportation (DOT)	This product is not regulated at quantities less than 5000lb Single containers over 5000lb are regulated as , Other Regulated Substances, Liquid, N.O.S (Methylene DiPhenyl Diisocyanate) 9, NA3082, PGIII, RQ.
International Air Transportation	This product is not regulated as a dangerous good.
International Water Transportation	This product is not regulated as a dangerous good.
Dangerous Goods Class	This product is not regulated as a dangerous good.
UN Number	Not Applicable
HAZCHEM Code	Not Applicable
Special Precautions for Use	Refer to PPE Guide. Not required when packages are sealed

SECTION 15 REGULATORY INFORMATION

Hazardous Substance: Classified as hazardous according to the criteria of NOHSC.

Not a Dangerous Good

No EPA data available

Poisons Schedule S6

SECTION 16 OTHER INFORMATION

Key/Legend:
TLV = Threshold limit value;
TWA = Time-weighted average;
STEL = Short-term exposure limit;
C = Ceiling limit
NOHSC = National Occupational Health & Safety Commission of Australia