Safety Data Sheet

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product Name: **AQUADHERE DURABOND PU**

Recommended Use: Wood glue.

Packaging Type 460 mL plastic bottle

Supplier: Selleys Australia, a division of DuluxGroup (Australia) Pty Ltd
ABN: 67 000 049 427
Street Address: 1 Gow Street
Padstow 2211
Australia
Telephone Number: +61 2 9781 8777
Facsimile: +61 2 9781 8825
Emergency Telephone: **1 800 033 111 (ALL HOURS)**

2. HAZARDS IDENTIFICATION

This material is hazardous according to criteria of Safe Work Australia; HAZARDOUS SUBSTANCE.

Not classified as Dangerous Goods by the criteria of the Australian Dangerous Goods Code (ADG Code) for transport by Road and Rail; NON-DANGEROUS GOODS.

Risk Phrases: Harmful by inhalation. Irritating to eyes, respiratory system and skin. May cause sensitisation by inhalation and skin contact.

Safety Phrases: Avoid contact with skin and eyes. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. After contact with skin, wash immediately with plenty of water (or soap and water if product is water insoluble). In case of insufficient ventilation, wear suitable respiratory equipment. In case of accident or if you feel unwell, seek medical advice immediately (show the label whenever possible).

Poisons Schedule: None allocated.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Components	CAS Number	Proportion	Risk Phrases
Polymeric MDI copolymer	53862-89-8	30-60%	-
Isocyanic acid, polymethylene polyphenylene ester	9016-87-9	13-30%	R20 R36/37/38 R42/43
Diphenylmethane-4,4-diisocyanate MDI	101-68-8	13-30%	R20 R36/37/38 R40 R42/43 R48/20
Diphenylmethanediisocyanate, mixture of 2,4 and 4,4 isomers	5873-54-1	1-3%	R20, R36/37/38, R42/43

4. FIRST AID MEASURES

For advice, contact a Poisons Information Centre (e.g. phone Australia 131 126; New Zealand 0800 764 766) or a doctor.

Inhalation:
Remove victim from area of exposure - avoid becoming a casualty. Remove contaminated clothing and loosen remaining clothing. Allow patient to assume most comfortable position and keep warm. Keep at rest until fully recovered. If patient finds breathing difficult and develops a bluish discolouration of the skin (which suggests a lack of oxygen in the blood - cyanosis), ensure airways are clear of any obstruction and have a qualified person give oxygen through a face mask. Apply artificial respiration if patient is not breathing. Seek immediate medical advice.

Skin Contact:
Wipe excess material from skin with a clean rag or paper towel (do NOT use solvent to clean skin). If skin or hair contact occurs, immediately remove any contaminated clothing and wash skin and hair thoroughly with running water. If swelling, redness, blistering or irritation occurs seek medical assistance.

Eye Contact:
If in eyes, hold eyelids apart and flush the eye continuously with running water. Continue flushing until advised to stop by a Poisons Information Centre or a doctor, or for at least 15 minutes.

Ingestion:
Rinse mouth with water. If swallowed, do NOT induce vomiting. Give a glass of water. Seek immediate medical assistance.

Medical attention and special treatment:
Treat symptomatically. Effects may be delayed.

5. FIRE FIGHTING MEASURES

Hazards from combustion products:
Combustible liquid.

Precautions for fire fighters and special protective equipment:
On burning will emit toxic fumes, including those of hydrogen cyanide , oxides of carbon and oxides of nitrogen . Fire fighters to wear self-contained breathing apparatus and suitable protective clothing if risk of exposure to vapour or products of combustion.

Suitable Extinguishing Media:
Dry agent (carbon dioxide, dry chemical powder) - water MUST NOT be allowed to come into contact with substance.

6. ACCIDENTAL RELEASE MEASURES

Emergency procedures:
SMALL SPILLS: Slippery when spilt. Avoid accidents, clean up immediately. Wipe up with rag or absorbent paper.

Methods and materials for containment and clean up:
LARGE SPILLS: Avoid breathing in vapours. Work up wind or increase ventilation. Slippery when spilt. Avoid accidents, clean up immediately. Wear protective equipment to prevent skin and eye contact and breathing in vapours. Scrape up excess material before cure. Collect and seal in properly labelled containers. Cured material can only be removed by cutting or abrasion.

7. HANDLING AND STORAGE

Classified as a C2 (COMBUSTIBLE LIQUID) for the purpose of storage and handling, in accordance with the requirements of AS 1940. Refer to State Regulations for storage and transport requirements.

Conditions for safe storage:
Store in a cool, dry, well ventilated place and out of direct sunlight. Store away from foodstuffs. Store away from incompatible materials described in Section 10. Keep dry - reacts with water, may lead to drum rupture. Keep containers closed when not in use - check regularly for leaks.

Precautions for safe handling:
Avoid skin and eye contact and breathing in vapour.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational Exposure Limits: No value assigned for this specific material by the National Occupational Health and Safety Commission. However, Exposure Standard(s) for constituent(s):

Isocyanates, all (as -NCO): 8hr TWA = 0.02 mg/m^3, 15 min STEL = 0.07 mg/m^3, Sen

As published by the National Occupational Health and Safety Commission.

TWA - The time-weighted average airborne concentration over an eight-hour working day, for a five-day working week over an entire working life.

STEL (Short Term Exposure Limit) - the average airborne concentration over a 15 minute period which should not be exceeded at any time during a normal eight hour work day. According to current knowledge this concentration should neither impair the health of, nor cause undue discomfort to, nearly all workers.

`Sen' Notice - sensitiser. The substance can cause a specific immune response in some people. An affected individual may subsequently react to exposure to minute levels of that substance.

These Exposure Standards are guides to be used in the control of occupational health hazards. All atmospheric contamination should be kept to as low a level as is workable. These exposure standards should not be used as fine dividing lines between safe and dangerous concentrations of chemicals. They are not a measure of relative toxicity.

Engineering controls:
Ensure ventilation is adequate and that air concentrations of components are controlled below quoted Exposure Standards. Use in well ventilated areas. Keep containers closed when not in use.

Personal Protective Equipment:
Selleys Factory Safe Handling Code: Yellow

Yellow - Wear overalls (or 'issued' long pants and long sleeve tops), safety boots, gloves, safety glasses and approved solvent canister. Always wash hands before smoking, eating, drinking or using the toilet. Wash contaminated clothing and other protective equipment before storage or re-use.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state:	Liquid
Colour:	Brown
Odour:	Earthy , Musty
Solubility:	Insoluble in water.
Specific Gravity:	1.14
Relative Vapour Density (air=1):	N Av

Vapour Pressure (20 °C):	<0.00001 mPa
Flash Point (°C):	>200
Flammability Limits (%):	N Av
Autoignition Temperature (°C):	>600
% Volatile by Volume:	N Av
Solubility in water (g/L):	Insoluble
Melting Point/Range (°C):	N App
Boiling Point/Range (°C):	>300 (decomposes)
pH:	N App
Viscosity:	N Av
Evaporation Rate:	N Av

10. STABILITY AND REACTIVITY

Chemical stability: Stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.

Conditions to avoid: Avoid exposure to heat, sources of ignition, and open flame. Avoid exposure to moisture.

Incompatible materials: Incompatible with acids , alcohols , amines , water and alkalis .

Hazardous decomposition products: Oxides of carbon. Oxides of nitrogen. Hydrogen cyanide. Isocyanates.

Hazardous reactions: Reacts with water liberating carbon dioxide. May rupture closed containers. Reaction accelerates at higher temperatures. Reaction between water and hot isocyanate may be vigorous.

11. TOXICOLOGICAL INFORMATION

No adverse health effects expected if the product is handled in accordance with this Safety Data Sheet and the product label. Symptoms or effects that may arise if the product is mishandled and overexposure occurs are:

Ingestion: Swallowing may result in irritation of the gastrointestinal tract.

Eye contact: An eye irritant.

Skin contact: Contact with skin will result in irritation. A skin sensitiser. Repeated or prolonged skin contact may lead to allergic contact dermatitis.

Inhalation: Material is irritant to the mucous membranes of the respiratory tract (airways). A respiratory sensitiser. Can cause possible allergic reactions, producing asthma-like symptoms. Symtpoms may include irritation of the eyes, nose, throat and lungs, possibly dryness of the throat, tightness of the chest and difficulty in breathing. Onset of respiratory symptoms may be delayed for several hours after exposure. A hyper-reactive response may develop to even minimal concentrations of MDI in sensitised individuals.

Long Term Effects:
No information available for the product. For Isocyanates: Animal studies have shown that respiratory sensitisation can be induced by skin contact with known respiratory sensitisers including diisocyanates. These results emphasise the need for protective clothing including gloves to be worn when handling these chemicals or in maintenance work. (1)
There are reports that chronic exposure by inhalation may result in a permanent decrease in lung function. (1)

Toxicological Data: No LD50 data available for the product. For the constituent Polymeric MDI (1):
Oral LD50 (rat): >5000 mg/kg (1)
Dermal LD50 (rabbit): >5000 mg/kg (1)
Inhalation LC50 (rat): 490 mg/kg (respirable aerosol) (1)

EYES(rabbit): 100ug - Draize - MILD

Rats were exposed for two years to a respirable aerosol of polymeric MDI which resulted in chronic pulmonary irritation at high concentrations. Only at the top exposure level (6 mg/m^3) was there a significant incidence of a benign lung tumour (adenoma) and one malignant tumour (adenocarcinoma). There were no lung tumours at 1 mg/m^3 and no effects at 0.2 mg/m^3. The tumour incidence, both benign and malignant, and the number of animals with tumours were no different from the controls. The increased incidence of lung tumours is associated with prolonged respiratory irritation and the concurrent accumulation of a yellow material in the lung, which occurred throughout the study. In the absence of prolonged high exposure leading to chronic irritation and lung damage, it is highly unlikely that tumour formation could occur. Industrial experience with humans has not shown any links between MDI exposure and cancer development.

No birth defects were seen in two independent animal (rat) studies.

Fetotoxicity was observed at doses that were highly toxic (including lethal) to the mother. Fetotoxicity was not observed at doses that were maternally toxic. The doses used in these studies were maximal, respirable concentrations, which were well in excess of defined ocupational exposure limits.

There is no substantial evidence of mutagenic potential.
Respiratory hypersensitivity in guinea pigs has resulted from dermal exposure to MDI. (1)

12. ECOLOGICAL INFORMATION

Ecotoxicity	Avoid contaminating waterways.
Persistence/degradability and mobility	No evidence of bioaccumulation. (1)
Aquatic toxicity:	Based on information on similar products: Harmless to aquatic organisms. (1) 48hr IC50 (Bacteria - E, coli): >100 mg/L (1)
48hr EC50 (Daphnia magna):	>1000 mg/L (1)
96hr LC50 (fish):	(Zebra fish): >1000 mgL (1)

13. DISPOSAL CONSIDERATIONS

Disposal methods:
Refer to Waste Management Authority. Dispose of material through a licensed waste contractor. Normally suitable for incineration by an approved agent. Empty containers must be decontaminated.

14. TRANSPORT INFORMATION

Road and Rail Transport
Not classified as Dangerous Goods by the criteria of the Australian Dangerous Goods Code (ADG Code) for transport by Road and Rail; NON-DANGEROUS GOODS.

Marine Transport
Not classified as Dangerous Goods by the criteria of the International Maritime Dangerous Goods Code (IMDG Code) for transport by sea; NON-DANGEROUS GOODS.

Air Transport
Not classified as Dangerous Goods by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulations for transport by air; NON-DANGEROUS GOODS.

15. REGULATORY INFORMATION

Classification: This material is hazardous according to criteria of Safe Work Australia; HAZARDOUS SUBSTANCE.

Hazard Category: Xn: Harmful
Xi: Irritant

Risk Phrase(s): R20: Harmful by inhalation.
R36/37/38: Irritating to eyes, respiratory system and skin.
R42/43: May cause sensitisation by inhalation and skin contact.

Safety Phrase(s): S24/25: Avoid contact with skin and eyes.
S26: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S28: After contact with skin, wash immediately with plenty of soap and water.
S38: In case of insufficient ventilation, wear suitable respiratory equipment.
S45: In case of accident or if you feel unwell, seek medical advice immediately (show the label whenever possible).

Poisons Schedule: None allocated.

All the constituents of this material are listed on the Australian Inventory of Chemical Substances (AICS).

16. OTHER INFORMATION

(1) Supplier Material Safety Data Sheet; 03/ 2004.

For further copies of this sheet or other product information contact Selleys Customer Service.
Phone: 1300 555 205 (Australia wide)
Fax: 1300 555 305 (Australia wide)
Phone: 9 820 4852 (New Zealand)
Fax: 0800 804 583 (New Zealand)

Reason(s) for Issue:
Revised Primary MSDS
Format change
Update in Ecological Information.
Update in Toxicological Information

This safety data sheet has been prepared by SH&E Shared Services.
This SDS summarises to our best knowledge at the date of issue, the chemical health and safety hazards of the material and general guidance on how to safely handle the material in the workplace. Since DuluxGroup Limited cannot anticipate or control the conditions under which the product may be used, each user must, prior to usage, assess and control the risks arising from its use of the material.

If clarification or further information is needed, the user should contact their DuluxGroup representative or DuluxGroup Limited at the contact details on page 1.

DuluxGroup Limited's responsibility for the material as sold is subject to the terms and conditions of sale, a copy of which is available upon request.