

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product Name: LIQUID NAILS DIRECT STICK

Recommended Use: Floor adhesive.

Supplier: Selleys Australia, a division of DuluxGroup (Australia) Pty Ltd
ABN: 67 000 049 427
Street Address: 1 Gow Street,
Padstow, NSW 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: Irritating to eyes, respiratory system and skin. Limited evidence of a carcinogenic effect. 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. Wear suitable protective clothing, gloves and eye/face protection. In case of insufficient ventilation, wear suitable respiratory equipment.

Poisons Schedule: None allocated.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Components	CAS Number	Proportion	Risk Phrases
Polymeric MDI copolymer	53862-89-8	10-<30%	-
Diphenylmethane-4,4-diisocyanate MDI	101-68-8	1-<10%	R20 R36/37/38 R40 R42/43 R48/20
Ingredients determined not to be hazardous	-	to 100%	R22, R38, R43
Isocyanic acid, polymethylene polyphenylene ester	9016-87-9	1-<10%	R20 R36/37/38 R42/43
Solvent naphtha (petroleum)heavy arom.	64742-94-5	1-<10%	R65

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.

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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:

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. On burning will emit toxic fumes, including those of hydrogen cyanide, oxides of carbon and oxides of nitrogen.

Precautions for fire fighters and special protective equipment:

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:

Fine water spray, normal foam, dry agent (carbon dioxide, dry chemical powder).

6. ACCIDENTAL RELEASE MEASURES

Emergency procedures:

If contamination of sewers or waterways has occurred advise local emergency services.

Methods and materials for containment and clean up:

SMALL SPILLS: Avoid skin and eye contact. Wipe up with absorbent (clean rag or paper towels). Allow absorbent to dry before disposing with normal household garbage.

LARGE SPILLS: Work up wind or increase ventilation. Wear protective equipment to prevent skin and eye contact. Scrape up excess material before cure. Contain - prevent run off into drains and waterways. Use absorbent (soil, sand or other inert material). Collect and seal in properly labelled containers or drums for disposal. Cured material can only be removed by cutting or abrasion.

7. HANDLING AND STORAGE

Classified as a C1 (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.

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Conditions for safe storage:

Store in cool place and out of direct sunlight. Keep dry - reacts with water. Store away from incompatible materials described in Section 10. Keep containers closed when not in use - check regularly for leaks.

Precautions for safe handling:

Avoid skin and eye contact and breathing in vapour, mists and aerosols.

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/m³, 15 min STEL = 0.07 mg/m³, 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. Keep containers closed when not in use.

Personal Protective Equipment:

The selection of PPE is dependant on a detailed risk assessment. The risk assessment should consider the work situation, the physical form of the chemical, the handling methods, and environmental factors.

Selleys Factory Safe Handling Code: Blue



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MANUFACTURE, PACKAGING AND TRANSPORT: Blue - Wear overalls (or 'issued' long pants and long sleeve tops), safety boots, gloves and face shield or chemical goggles. Always wash hands before smoking, eating, drinking or using the toilet. Wash contaminated clothing and other protective equipment before storage or re-use.

If inhalation risk exists due to processing vapours, wear organic vapour respirator meeting the requirements of AS/NZS 1715 and AS/NZS 1716.

FOR CONSUMER USE: When using the product as an adhesive or sealant: wear protective clothing, impervious gloves and safety glasses.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state:	Viscous liquid
Colour:	Brown
Solubility:	Insoluble in water. Uncured material is soluble in organic solvents.
Specific Gravity:	1.4
Relative Vapour Density (air=1):	>1
Vapour Pressure (20 °C):	Not available
Flash Point (°C):	>107
Flammability Limits (%):	0.8-6.0
Autoignition Temperature (°C):	Not available
% Volatile by Volume:	10
Solubility in water (g/L):	Insoluble
Melting Point/Range (°C):	Not applicable
Boiling Point/Range (°C):	180
Decomposition Point (°C):	Not available
pH:	Not applicable
Viscosity:	Not available
Evaporation Rate:	Not available

10. STABILITY AND REACTIVITY

Chemical stability:	Stable under normal conditions of use.
Conditions to avoid:	Avoid exposure to moisture. Avoid exposure to heat, sources of ignition, and open flame.
Incompatible materials:	Incompatible with acids, alcohols and oxidising agents.
Hazardous decomposition products:	Hydrogen cyanide. Oxides of carbon. Oxides of nitrogen.
Hazardous reactions:	Reacts with moisture liberating carbon dioxide.

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 nausea, vomiting, and abdominal pain.
Eye contact:	An eye irritant.
Skin contact:	Contact with skin will result in irritation. A skin sensitizer. Repeated or prolonged skin contact may lead to allergic contact dermatitis.

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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.

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.

Toxicological Data: No LD50 data available for the product. For the constituent Polymeric MDI (1):

Oral LD50 (rat): >5000 mg/kg

Dermal LD50 (rabbit): >5000 mg/kg

Inhalation LC50 (rat): 490 mg/kg (respirable aerosol)

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/m³) was there a significant incidence of a benign lung tumour (adenoma) and one malignant tumour (adenocarcinoma). There were no lung tumours at 1 mg/m³ and no effects at 0.2 mg/m³. 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 occupational exposure limits.

There is no substantial evidence of mutagenic potential.

Respiratory hypersensitivity in guinea pigs has resulted from dermal exposure to MDI.

12. ECOLOGICAL INFORMATION

Ecotoxicity Avoid contaminating waterways.

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.

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.

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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): R36/37/38: Irritating to eyes, respiratory system and skin.
R40: Limited evidence of a carcinogenic effect.
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.
S36/37/39: Wear suitable protective clothing, gloves and eye/face protection.
S38: In case of insufficient ventilation, wear suitable respiratory equipment.

Poisons Schedule: None allocated.

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

16. OTHER INFORMATION

(1) Material Safety Data Sheet - Australia Pty Ltd;
09/ 2003.

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: 0800 735 539 (New Zealand)
Fax: 0800 804 583 (New Zealand)

Reason(s) for Issue:

5 Yearly Revised Primary MSDS
Change in Hazardous Substance Classification
Alignment to HSNO requirements

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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.