

SAFETY DATA SHEET

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Date: 28/11/2016

Hazardous according to criteria of worksafe Australia
MAX BOND MPU 2-PART POLYURETHANE ADHESIVE PART B

Revision: 0

1. Substance/preparation and company identification

1.1 Product Identifier

Max Bond MPU 2-Part Polyurethane Adhesive **Part B**

1.2 Product use and description

Two-part polyurethane adhesive for flooring applications

1.3 Details of the supplier of the safety data sheet

Nexus Adhesives Pty Ltd
42 Healey Road, Dandenong South.
Victoria 3175 Australia
Telephone: +61 3 9706 4022
Telefax number: +61 3 9706 4122

1.4 Emergency telephone number

0417 489 877 [within Australia]

2. Hazard identification

2.1 GHS Hazard Classification:

Hazardous according to criteria of WHS and ADG codes and regulations.

2.2 Hazard Statements

H315	Causes skin irritation
H317	May cause an allergic skin reaction
H319	Causes serious eye irritation
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled
H335	May cause respiratory irritation
H351	Suspected of causing cancer
H373	May cause damage to organs through prolonged or repeated exposure

2.3 Hazard Pictogram



Exclamation
Mark

Health Hazard

2.3 Signal Word

Danger

2.4 Precautionary Statements - Prevention

P201	Obtain special instructions before use.
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P202	Do not handle until all safety precautions have been read and understood
P260	Do not breathe dust/fumes/gas/mist/vapours/spray.
P264	Wash skin thoroughly after handling
P271	Use only outdoors or in well-ventilated area
P272	Contaminated work clothing must not be allowed out of the workplace
P280	Wear eye protection/face protection, wear protective gloves
P281	Use personal protective equipment as required
P285	In case of inadequate ventilation wear respiratory protection

2.5 Precautionary Statements – Response

P362	Take off contaminated clothing and wash before use
P302+352	IF ON SKIN: Wash with plenty of soap and water
P304+340+312	IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell
P305+351+338	IF IN EYE: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
P308+313	IF exposed: Call a POISON CENTER or doctor/physician
P333+313	If skin irritation or rash occurs: Get medical advice/attention
P337+313	If eye irritation persists: get medical advice/attention
P342+311	If experiencing respiratory symptoms: Call a POISON CENTER/doctor

2.6 Precautionary Statements – Storage

P405	Store locked up.
P403+233	Store in a well ventilated place. Keep container tightly closed.

2.7 Other hazards

P501	Dispose of contents/container in accordance with local regulations.
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3. Composition/information on ingredients

Chemical nature

Liquid

Chemical Name	CAS No.	Conc (%w/w)	Classification
4,4'-diphenylmethane diisocyanate (MDI)	26447-40-5	60 – 100%	H351 Suspected of causing cancer H332 Harmful if inhaled H373 May cause damage to organs through prolonged or repeated exposure H319 Causes serious eye irritation H315 Causes skin irritation H335 May cause respiratory irritation H334 May cause allergy or asthma

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			symptoms or breathing difficulties if inhaled H317 May cause an allergic skin reaction
Isocyanic acid, polymethylenepolyphenylene ester	Not Assigned	30 – 60%	

4. First-aid measures

4.1 Description of first aid measures:

General advice:

Remove contaminated clothing.

If inhaled:

Keep patient calm, remove to fresh air and seek medical attention if breathing becomes difficult.

Apply artificial respiration if not breathing, perform CPR if necessary.

On skin contact:

Immediately remove contaminated clothing, Wash thoroughly with soap and water. Seek medical attention in event of irritation.

On contact with eyes:

Immediately wash affected eyes for at least 15 minutes under running water with eyelids held open, consult an eye specialist without delay.

Removal of contact lenses after an eye injury should be undertaken by skilled personnel.

On ingestion:

Rinse mouth immediately and then drink plenty of water, DO NOT induce vomiting unless directed to do so by a physician. Seek medical attention immediately.

Advice to doctor:

Treat symptomatically

4.2 Most important symptoms and effects, both acute and delayed:

If inhaled:

May cause nausea and vomiting

On skin contact:

Cause burns. May cause sensitisation by skin contact.

On contact with eyes:

Cause burns. Cause severe inflammation and may damage the cornea.

On ingestion:

May cause nausea and vomiting.

4.3 Indication of any immediate medical attention and special treatment needed

Seek medical attention

5. Fire-fighting measures

5.1 Suitable extinguishing media:

Water fog, dry extinguishing media, foam, carbon dioxide.

5.2 Special hazards arising from the substance and mixture

Avoid contamination with oxidizing agents i.e. nitrates, oxidizing acids, chlorine bleaches, pool chlorine etc. as ignition may results.

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5.3 Advice for fire fighters:

Fire Fighting:

Alert Fire Brigade and tell them location and nature of hazard.
Full protective clothing and self-contained breathing apparatus when necessary.
Prevent, by any means available, spillage from entering drains or water course.
Use water delivered as a fine spray to control fire and cool adjacent area.
Avoid spraying water onto liquid pools.

Fire/Explosion Hazard:

Combustible.
Moderate fire hazard when exposed to heat or flame.
When heated to high temperatures decomposes rapidly generating vapour which pressures and may then rupture containers with release of flammable and highly toxic isocyanate vapour.
Burns with acrid black smoke and poisonous fumes.
Combustion yields traces of highly toxic hydrogen cyanide HCN, plus toxic nitrogen oxides NO_x and carbon monoxide.

6. Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Avoid accidents, clean up immediately. Slippery when spilt. Personnel involved in the cleanup should wear full protective clothing.

Evacuate all unnecessary personnel. Eliminate all sources of ignition. Increase ventilation. Avoid generating dust. Stop leak if safe to do so. Isolate the danger area.

6.2 Environmental precautions

Do NOT let product reach drains or waterways. If product does enter a waterway, advise the Environmental Protection Authority or your local Waste Management. Use clean, non-sparking tools and equipment.

6.3 Methods and materials for containment and cleaning up

Contain and sweep/shovel up spills with dust binding material or use an industrial vacuum cleaner. Transfer to a suitable, labeled container and dispose of promptly. Recycle if possible.

7. Handling and storage

7.1 Precautions for safe handling

Handle in accordance with good industrial hygiene and safety practice.
Avoid all personal contact, including inhalation.
Wear protective clothing when risk of exposure occurs.
Use in well-ventilated area.

DO NOT enter confined spaces until atmosphere has been checked.
DO NOT allow clothing wet with material to stay in contact with skin.

For commercial quantities of isocyanates:

Isocyanates should be stored in adequately bunded areas. Nothing else should be kept within the same bunding. Pre-polymers need not be segregated.

Drums of isocyanates should be stored under cover, out of direct sunlight, protected from rain, protected from physical damage and well away from moisture, acids and alkalis.

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Where isocyanates are stored at elevated temperatures to prevent solidifying, adequate controls should be installed to prevent the high temperatures and precautions against fire should be taken. Store in original containers.
Keep containers securely sealed.
No smoking, naked lights or ignition sources.
Store away from incompatible materials and foodstuff containers.

7.2 Conditions for safe storage, including any incompatibilities

Suitable container:

Metal can or drum
Packaging as recommended by manufacturer.
Check all containers are clearly labelled and free from leaks.

Storage Incompatibility:

Avoid reaction with water, alcohols and detergent solutions.
Isocyanates and thiosocyanates are incompatible with many classes of compounds, reacting exothermally to release toxic gasses.
A range of exothermic decomposition energies for isocyanates is given as 20-30 kJ/mol.

7.3 Specific end use

See section 1.2 for further information

8. Exposure controls and personal protection

8.1 Control parameters

Occupational Exposure Limits

Chemical Name	CAS No.	TWA	STEL
Isocyanates, all (as-NCO)	various	0.02 mg/m ³	0.07 mg/m ³

8.2 Exposure controls

Appropriate engineering controls

Ensure adequate ventilation of the working area.

Hand protection:

Suitable chemical resistant safety gloves (PVC)

Eye protection:

Safety glasses with side-shields (frame goggles) (e.g. EN 166)

Respiration apparatus:

Self-contained breathing apparatus. Suitable half mask respirator with filter P2 (e.g. EN 143)

Environmental exposure control:

See section 6 for further information.

General safety and hygiene measures:

Hands and/or face should be washed before breaks and at the end of the shift. Avoid contact with skin and eyes.

9. Physical and chemical properties

Appearance:	Liquid
Colour:	Brown liquid
Odour:	No data available
Odour threshold:	No data available
pH value:	No data available
Melting/freezing point:	No data available
Initial boiling point:	No data available
Flash point:	> 100°C Method: Seta closed cup

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Evaporation rate:	No data available
Flammability:	No data available
Vapour pressure:	No data available
Vapour density:	No data available
Relative density:	Approx. 1.2 kg/L
Solubility:	Reacts in water
Partition coefficient:	No data available
Auto ignition temperature:	Not applicable
Viscosity:	51 mPa.s
Specific heat value:	No data available
VOC content:	No data available
% volatile:	No data available
Saturated vapour concentration:	No data available

10. Stability and reactivity

10.1 Reactivity

Reacts with water, alcohols and detergent solution.
Incompatible with many classes of compounds, reaction releases toxic gases.
Reacts with amines, strong base, aldehydes, alcohols, alkali metals, ketones, mercaptans, strong oxidisers, hydrides, phenols and peroxides, can cause vigorous release of heat. Acid and bases initiate polymerisation reactions in these materials.

10.2 Chemical stability

Stable under normal conditions.
Unstable in presence of incompatible materials.

10.3 Conditions to avoid

See Section 7.

10.5 Incompatible materials and possible hazardous reactions

See Section 10.1 and Section 7.

10.6 Hazardous decomposition products

No data available

11. Toxicological information

11.1 Information on route of exposure and symptoms

If inhaled:

May cause nausea and vomiting, can cause respiratory irritation in some person. The body's response to such irritation can cause further lung damage.

1.38 mg/L Exposure time: 4hr

Test Atmosphere: dust/mist

Method: Calculation method

On skin contact:

May cause sensitisation and inflammation by skin contact. The material can accentuate any pre-existing dermatitis condition. Open cuts, abraded or irritated skin should not be exposed to this material.

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Entry into blood-stream through cuts, abrasions or lesions, may produce systemic injury with harmful effects. Examine the skin prior to the use of the material and ensure that any external damage is suitably protected.

On contact with eyes:

May cause severe inflammation and may damage the cornea.

On ingestion:

May cause nausea and vomiting.

11.2 Numerical measure of toxicity

4,4'-diphenylmethane diisocyanate (MDI)

Toxicity:

Dermal (rabbit) LD50: >9400 mg/kg

Inhalation (rat) LC50: 1.38 mg/L/4hr

Oral (rat) LD50: >10,000 mg/kg

Germ cell mutation: 200 ug/plate

12. Ecological information

12.1 Ecotoxicity

4,4'-diphenylmethane diisocyanate(MDI)

Algae EC50/72h: 1640 mg/l

Fish LC50/96h: >1000 mg/l

Crustacea NOEC/21days: >=10 mg/l

Sources:

OECD Test Guidelines 202, 203, 211

12.2 Persistence and degradability

4,4'-diphenylmethane diisocyanate(MDI)

Persistence in water/soil – LOW (half-life – 1 day)

Persistence in air – LOW (half-life – 0.24 day)

12.3 Bioaccumulative potential

4,4'-diphenylmethane diisocyanate(MDI)

BCF = 200

Bioaccumulation unlikely

12.4 Mobility in soil

4,4'-diphenylmethane diisocyanate(MDI)

No data available

12.5 Other adverse effects

No data available.

13. Disposal considerations

13.1 Safe handling and disposal methods

Dispose of this material and its container, sending them to local company authorised for collection of hazardous waste.

13.2 Disposal of any contaminated packaging

Do NOT reuse empty containers. Empty containers can be sent for disposal or recycling.

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14. Transport information

14.1 UN Number

Not available

14.2 UN proper shipping name

Not applicable

14.3 Transport hazard class(es)

Not applicable

14.4 Packaging group

Not applicable

14.5 Environmental hazards

Environmental hazards No

Marine pollutant No

14.6 Special precautions for users

Transport in secure and safe packaging. Keep all containers upright. Transporter should be aware of emergency procedures in place in case of any accident or leakage. See Section 4-8 for further information.

14.7 Hazchem Code

Not Applicable

14.8 Other codes

ARD/RID

Not Regulated

IMDG

Not Regulated

IATA

Not regulated

15. Regulatory information

15.1 Safety, health and environmental regulations specific for the product

4,4'-diphenylmethane diisocyanate(MDI)

Found on the following regulatory lists:

Australia Exposure Standards

Australia Inventory of Chemical Substances (AICS)

Australia Hazardous Substances Information System – Consolidated Lists

International Agency for Research on Cancer (IARC) – Agents Classified by the IARC Monographs

15.2 Poisons schedule number

None

16. Other information

Any other intended applications should be discussed with the manufacturer.

Revisions:

0

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Sections Reviewed

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Contact
Technical
0417489877

Sales
0448395091

Asterisk * in the left hand margin indicate an amendment from the previous version.

The data contained in this safety data sheet are based on our current knowledge and experience and describe the product only with regard to safety requirements. The data do not describe the product's properties (product specification). Neither should any agree property nor the suitability of the product for any specific purpose be deduced from the data contained in the safety data sheet. It is the responsibility of the recipient of the product to ensure any proprietary rights and existing laws and legislation are observed.