



NATIONAL ADHESIVE DISTRIBUTORS CC

CK 2000/063562/23 VAT No.: 4370194633

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MATERIAL SAFETY DATA SHEET

SECTION 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND COMPANY

PRODUCT NAME: GLUE DEVIL PU MARINE GRADE WOOD GLUE

TRADE NAME: PU Marine Wood Glue.

PRODUCT CODE: GD 831

MANUFACTURER: National Adhesive Distributors cc (Head Office)
93 Goodwood Road
Mahogany Ridge
Westmead
Durban
3608

USE OF SUBSTANCE/PREPARATION: One Component PU Adhesive

SECTION 2. HAZARD IDENTIFICATION

Classification of the mixture

Classification according to Regulation (EC) No 1272/2008

This product is classified as dangerous according to EU Directives- (EC) No. 1272/2008.

Acute toxicity, Inhalative, Category 4 (H332)

Skin irritation, Category 2 (H315)

Eye irritation, Category 2 (H319)

Sensitization of the respiratory airways, Category 1 (H334)

Sensitization of the skin, Category 1 (H317)



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Carcinogenicity, Category 2 (H351)

Specific target organ toxicity (single exposure), Category 3 (H335)

Specific target organ toxicity (repeated exposure), Category 2 (H373)

Label Elements

Labelling according to Regulation EC No 1272/2008 (CLP)



Contains isocyanates. May produce an allergic reaction

Hazard Statements

- H315: Causes skin irritation.
- H332: Harmful if inhaled.
- H319: Causes serious eye irritation
- H334: May cause allergy or asthma symptoms or breathing difficulties if inhaled
- H317: May cause an allergic skin reaction
- H351: Suspected of causing cancer
- H335: May cause respiratory irritation
- H373: May cause damage to organs through prolonged or repeated exposure

Precautionary Statements

- P102: Keep out of reach of children.
- P260: Do not breathe dust/fume/gas/mist/vapours/spray



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- P280: Wear protective gloves and eye protection/face protection.
- P302+P352: IF ON SKIN: In case of inadequate ventilation wear respiratory protection
- P304+P340: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
- P305+351+338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing
- P309+P311: IF exposed or you feel unwell: Call a POISON CENTER or doctor/physician

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

According to EU Directives- (EC) No. 1272/2008:

| Chemical Name | CAS No. | EINECS/ELINCS No. | REACH Registration Number | Conc. | Classification in Mixture |
|--|-----------|-------------------|---------------------------|--------|---|
| | | | | (%w/w) | |
| PMDI (Polymethylene polyphenyl polyisocyanate) | 9016-87-9 | - | | 30-50 | Carc. 2; H351 Acute Tox. 4; H332 STOT RE 2; H373 Eye Irrit. 2; H319 STOT SE 3; H335 Skin Irrit. 2; H315 Resp. Sens. 1; H334 Skin Sens. 1; H317 |

*For the full text of the H-Statements mentioned in this Section, see Section 16.

SECTION 4. FIRST AID MEASURES

- In case of eye contact:**
Hold the eyes open and rinse with preferably lukewarm water for a sufficiently long period of time (at least 10 minutes)
Seek medical advice.
- In case of skin contact:**
Wipe off. Wash affected areas with soap and plenty of water. If irritation persists, seek medical advice.
- If swallowed:**
Do not induce the patient to vomit. Rinse mouth.



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Give victim two glasses of water.

Never give anything by mouth to an unconscious person.

Seek medical advice.

If inhaled:

Take the person into the fresh air. Seek medical advice.

SECTION 5. FIRE-FIGHTING MEASURES

Special protective equipment/procedures:

A self –contained respirator and protective clothing should be worn.

Mask and chemical resistant personal protective equipment should be used.

Determine the need to evacuate or isolate the area according to your local emergency plan.

Hazards during fire fighting

On burning may emit toxic fumes

Suitable extinguishing media:

Water fog (if unavailable fine water spray), foam, dry chemical or carbon dioxide can be used.

Unsuitable extinguishing media:

No data available

Hazards combustion products:

In event of fire, oxides of carbon, nitrogen and hydrogen chloride can be released.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Spill / Leak:

Avoid contact with.

Ventilate the area with fresh air.

Stop the leak if there is no risk.

Personal precautions:

Use personal protective equipment (protective gloves, work clothes and glasses) Provide adequate ventilation. Smoking is prohibited.

Methods for cleaning up:

Clean away leakage mechanically;



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Cover leakage with damp absorbent material (eg: sawdust, sand).

After 1 hour, collect in a waste container.

Do not close (it develops carbon dioxide).

Keep humid and leave for many days in the open air, in a controlled area. Further disposal by incineration in accordance with local laws in force.

Environment related measures:

Collect the resulting residue containing solution.

Place in a closed container approved for transportation by appropriate authorities.

Dispose of collected material as soon as possible.

Prevent the spilled material to leak and contact with garbage, canals and sewage

If the product has caused environmental pollution (sewers, waterways, soil or air), inform the relevant authorities.

SECTION 7. HANDLING AND STORAGE

Usage:

Avoid contact with eyes and skin.

Wear appropriate personal protective equipment.

Avoid breathing of vapours.

While using this product do not eat, drink or smoke.

Ensure good ventilation.

Keep in original container, tightly close the container used. Do not burn the product container.

Storage:

Store in accordance with local regulations.

Store away from heat sources and foodstuffs, beverages and food.

Keep container tightly closed.

Store in a cool, dry place. (between +5°C ve +25°C)



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SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control Parameters:

No data available for the mixture

| Substance | CAS No: | Basis / Country | Short Time Value | Short Time Value | Time Weighted Average Exposure Limit | Time Weighted Average Exposure Limit |
|---|----------------------|-------------------|------------------|------------------|--------------------------------------|--------------------------------------|
| Diphenyl methane diisocyanate, isomers and homologues (1) | 9016-87-9 / 101-68-8 | Germany/ TRGS 900 | 0,05 | | | |

1: "Polymeric MDI" (PMDI) is a technical grade MDI, containing 30 % - 80 % w/w 4,4'-methylene diphenyl isocyanate (MDI); the remainder consists of MDI oligomers and MDI homologues

(1) 15 minutes average value

Engineering Controls:

Contains Polymethylene polyphenyl isocyanate and propane/butane and DME gases.

Use general dilution ventilation and/or local exhaust ventilation. If ventilation is not adequate, use respiratory protection equipment.

Personal Protection Equipment:

Eyes: Avoid eye contact. Safety goggles should be worn.

Skin: Avoid skin contact.

Chemical resistant gloves should be worn.

Recommended: Butyl rubber / nitrile rubber gloves. Respiratory: Avoid breathing of vapours.

Respiratory protection should be used.

In case of long-term interactions, fresh air mask should be used.



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Hygiene Measures:

Avoid contact with eyes.

Especially in confined places, make sure you have proper ventilation.

Follow good industrial hygiene and safety practice.

Especially before eating, drinking or smoking, wash hands. While using the product, do not drink, eat or smoke.

Environmental exposure controls:

Refer to section 6 and 12.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Viscous Liquid

Odour: Characteristic

Colour: Dark Brown

Important Health, Safety and Environmental Information:

| | |
|-------------------|--------------------------------|
| Specific Gravity: | 1,14 ± 0,03 gr/cm ³ |
| Boiling Point: | no data available |
| Melting Point: | no data available |
| Vapour Pressure: | no data available |
| Inflammation: | no data available |
| Water Solubility: | insoluble, reacts with water |

The above information is not intended for use in preparing product specifications.

SECTION 10. STABILITY AND REACTIVITY

Chemical Stability:

Stable under normal usage conditions.

Materials to avoid:

Reacts with alcohols and amines. Reacts with water forming carbon dioxide.



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Hazardous Polymerization:

Hazardous polymerization will not occur

SECTION 11. TOXICOLOGICAL INFORMATION

No data available for the mixture

Acute Toxicity

| Acute Toxicity | | | | | | | | |
|---|-----------|----------------------|-----------|--------|-------------|---------------|---------|--|
| Substance | Cas No | Exposure Type | Parameter | Method | Value | Exposure Time | Species | Value Determination |
| Diphenylmethanediisocyanate, isomers and homologues | 9016-87-9 | Oral | LD50 | | >2000 mg/kg | | rat | Toxicological studies of a comparable product. |
| | | Inhalation (aerosol) | LD50 | | 490 mg/m3 | 4 h | | Literature/ Supplier |

May cause allergic respiratory response.

MDI concentrations above the exposure guidelines may cause allergic respiratory reactions in individuals already sensitized.

Asthma-like symptoms may include coughing, difficult breathing and a feeling of tightness in the chest. Occasionally, breathing difficulties may be life threatening.

Corrosion / Irritation

| Corrosion / Irritation | | | | | | | |
|---|-----------|---------------|------------|-----------|---------------|---------|--|
| Substance | Cas No | Exposure Type | Result | Method | Exposure Time | Species | Value Determination |
| Diphenylmethanediisocyanate, isomers and homologues | 9016-87-9 | Skin | irritating | OECD /404 | | rabbit | Toxicological studies of a comparable product. |



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May cause eye and skin irritation.

Sensitization

| Sensitization | | | | | | | |
|---|-----------|-------------------|-------------|-----------|---------------|---------|--|
| Substance | Cas No | Exposure Type | Result | Method | Exposure Time | Species | Value Determination |
| Diphenylmethanediisocyanate, isomers and homologues | 9016-87-9 | skin / inhalation | sensitizing | OECD /404 | | rabbit | Toxicological studies of a comparable product. |

Repeated contact can cause allergic reactions.

SECTION 12. ECOLOGICAL INFORMATION

No test data is available on the mixture.

Toxicity

No test data is available on the mixture.

| Substance | Cas No: | Method | Parameter | Result | Duration | Species | Value Source |
|---|-----------|-----------|-----------|--------|----------|----------------------------|----------------------|
| | | | | mg/l | h | | |
| Diphenyl methane diisocyanate, isomers and homologues (1) | 9016-87-9 | OECD/209 | EC50 | >100 | 3 | Activated Sludge/bacterial | Literature/ Supplier |
| | | OECD/202 | EC50 | >1000 | 24 | Daphnia Magna /Water Flea | Literature/ Supplier |
| | | OECD /203 | LC50 | >1000 | 96 | Danio Rerio / Zebra Fish | Literature/ Supplier |

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Persistence and Degradability

| Persistence and Degradability | | | | | |
|---|-----------|-----------|--------|----------|---------------------|
| Substance | Cas No: | Method | Result | Duration | Value Source |
| | | | % | Day | |
| Diphenyl methane diisocyanate, isomers and homologues (1) | 9016-87-9 | OECD/302C | 0 | 28 | Literature/Supplier |

Contains no biodegradable products

Bioaccumulation

Contains no bio-accumulative substances

Movement and Partitioning:

In the aquatic environment, movement is expected to be limited by its reaction with water forming predominantly insoluble polyureas.

Other adverse effects.

The product reacts with water at the interface forming CO₂ and a solid insoluble product with high melting point (polyurea). This reaction is accelerated by surfactants (e.g. detergents) or by water-soluble solvents. Previous experience shows that polyurea is inert and non-degradable.

SECTION 13. DISPOSAL CONSIDERATIONS**Product Disposal:**

Dispose of in accordance with local regulations.

Packing Disposal:

Dispose of in accordance with local regulations.



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SECTION 14. TRANSPORT INFORMATION

Road/Rail (ADR/RID): Not subject to ADR/RID

Sea Transport (IMDG): Not subject to IMDG

Air Transport (IATA): Not subject to IMDG

SECTION 15. REGULATORY INFORMATION

Labeling: Hazardous

National Legislation/Regulations:

COMMISSION REGULATION (EU) No 453/2010 of 20 May 2010 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH)

SECTION 16. OTHER

Information Sources:

This SDS is prepared based on the information received from the suppliers.

Full text of H-phrases referred to under sections 2 and 3

- H315: Causes skin irritation
- H332: Harmful if inhaled.
- H319: Causes serious eye irritation
- H334: May cause allergy or asthma symptoms or breathing difficulties if inhaled
- H317: May cause an allergic skin reaction
- H351: Suspected of causing cancer
- H335: May cause respiratory irritation
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Additional Information

The information provided in this Safety Data Sheet is correct to the best of our knowledge, Information and belief at the date of its publication.

The information given is designed only as guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

It is the responsibility of persons in receipt of this Product Safety Data Sheet to ensure that the information contained herein is properly read and understood by all people who may use, handle, dispose or in any way come in contact with the product. If the recipient subsequently produces a formulation containing the product, it is the recipient's sole responsibility to ensure the transfer of all relevant information from the Product Safety Data Sheet to their own Product Safety Data Sheet.

All information and instructions provided in this Safety Data Sheet (SDS) are based on the current state of scientific and technical knowledge at the date indicated on the present SDS. As stated above, this Safety Data Sheet has been prepared in compliance with applicable European law. If you purchase this material outside Europe, where compliance laws may differ, you should receive from your local supplier a SDS applicable to the country in which the product is sold and intended to be used. Please note that the appearance and content of the SDS may vary – even for the same product between different countries, reflecting the different compliance requirements.

REVISED JUNE 2019