SAFETY DATA SHEET

Gorilla Glue

1. IDENTIFICATION OF THE PREPARATION AND OF THE COMPANY

Product name Gorilla Glue

Product type Polyurethane adhesive

Intended use Adhesive for wood, stone metal, ceramic and more

Supplier

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2. HAZARDS IDENTIFICATION

This preparation is classified as harmful. Harmful by inhalation. Irritating to the eyes, respiratory system and skin. May cause sensitization by inhalation and skin contact.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Name	Einecs-no	CAS-no	Content	Symbol	R-phrases
Diphenylmethane-diisocyanate, isomers and homologues	-	9016-87-9	45-65 %	Xn	R20, 36/37/38, R42/43

4. FIRST AID MEASURES

General: In all cases of doubt, or when symptoms persist, seek medical advice. Bring the Material Safety Data Sheet or label from the bottle. Never give anything by mouth to an unconscious person.

Inhalation: Remove to fresh air, keep patient warm and at rest, if breathing is irregular or stopped, administer artificial respiration. Give nothing by mouth. If unconscious place the person in recovery position. Seek medical advice.

Eye contact: Flush eyes with water for at least 10 minutes while holding eyelids open. Seek medical advice.

Skin contact: Soiled, soaked clothes and shoes must be immediately removed. Wash the skin thoroughly with plenty of water and soap or use a cleanser based on polyethylene glycol. If skin reactions occur, seek medical advice.

Ingestion: Wash out mouth with water. If material has been swallowed and the exposed person is conscious; give small quantities of water to drink. Keep at rest. Do not induce vomiting. Medical advice is required.

5. FIRE-FIGTHING MEASURES

Extinguishing Media: Carbon dioxide, dry powder, foam. In cases of large scale fires, water spray should be used. If water is used, it should be used in very large quantities. The reaction between water and isocyanate may be vigorous.

Special hazards: In case of fire, formation of carbon monoxide, nitrogen oxide, isocyanate vapour, and traces of hydrogen cyanide is possible.

Protective equipment for fire-fighters: Fire fighters have to wear full-face, self-contained breathing apparatus and impervious protective clothing.

Recommendations: Fire will produce dense black smoke. Exposure to decomposition products may cause a health hazard. Cool closed containers exposed to fire with water, if possible, remove them from the danger area. Do not allow run-off from fire fighting to enter drains or water courses.

6. ACCIDENTAL RELEASE MEASURES

Personal precaution in spill: Wear necessary protective equipment (see section 8). Avoid breathing vapours and contact with skin.

Spill clean up methods: Remove mechanically. Cover the remainder with wet absorbent material, e.g. sand, earth, vermiculite, diatomaceous earth. After approx. one hour place it all in a container for disposal, according to local regulations (see section 13). Do not seal (evolution of CO_2). Keep the disposal in a safe ventilated area for several days. Clean preferably with a detergent; avoid use of solvent.

Environmental precautions: Do not allow to enter drains or watercourses. If the product contaminates lakes, rivers, sewers or drains, inform appropriate authorities in accordance with local regulations.

7. HANDLING AND STORAGE

Handling: Ensure adequate ventilation or exhaust ventilation in the working area. Exhaust ventilation necessary if product is sprayed. Avoid skin and eye contact. Avoid inhalation of vapour and spray mist.

Storage: Keep container tightly closed and dry. Store the product above freezing.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Ingredient name	WEL 8 hrs limit	WEL 15 min limit
diphenylmethane diisocyanate, isomers and homologues	0.02 mg/m³, (As NCO)	0.07 mg/m³, (As NCO)

Reference: EH40-WEL (United Kingdom (UK), 9/2006). Notes: As NCO

Personal protection

Respiratory protection: Respiratory protection required in insufficiently ventilated working areas and during spraying. An air-fed mask, or for short periods of work, a combination of charcoal filter and particulate filter is recommended (filter type A).

People who suffer of hypersensitivity of the respiratory tract e.g. asthmatics and those who suffer from chronic bronchitis are unsuited to work with this product.

Hand protection: Use protective gloves. Suitable materials for safety gloves:

Polychloroprene-CR:	thickness:	>= 0.5mm;	breakthrough time:	>= 480 min.
Nitrile rubber-NBR:	thickness:	>= 0.35mm;	breakthrough time:	>= 480 min.
Butyl rubber-IIR:	thickness:	>= 0.5mm;	breakthrough time:	>= 480 min.
Fluorinated rubber-FKM:	thickness:	>= 0.4mm;	breakthrough time:	>= 480 min.

Recommendation: Changed contaminated gloves immediately.

Skin protection: Wear suitable protective clothing. Take of immediately all contaminated cloth and shoes.

Eye protection: Chemical goggles or full face shields are recommended to protect against splash of liquids.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state: Liquid

Colour: Dark brown

Odour: Earthy, musty

Boiling point: > 300° C

Viscosity (Brookfield): 4.000-7.000 mPa.s (RVT sp. 6 / 20 rpm at 25° C)

Specific gravity: Approx. 1,14 g/cm³ at 20° C

Vapour pressure: 21 hPa at 20° C
47 hPa at 50° C

Flash point: >250° C

Solubility in water: Insoluble reacts with water

10. STABILITY AND REACTIVITY

Stability: No hazardous decompositions products when stored and handled correctly (see section 7).
Temperatures above 250° C may produce hazardous decomposition products and isocyanate can be released.

Hazardous reactions: Exothermic reaction with amines and alcohols. Reacts with water forming CO_2; in closed containers, pressure build-up could result in distortion, expansion and, in extreme cases, bursting of the container.

11. TOXICOLOGICAL INFORMATION

Acute Toxicity: LD50 oral, rat: > 5000 mg/kg

Inhalation: May cause irritation of the mucous membranes of nose, throat or trachea.

Skin contact: Prolonged or repeated contact may result in dermatitis, either irrigative or allergic.

Eye contact: May result in conjunctiva irritation and mild corneal opacity.

Special properties/effects: Overexposure, especially when spraying coatings containing isocyanate without the necessary precautions, entails the risk of concentration - dependent irritating effects on eyes, nose throat, and respiratory tract. Delayed appearance of the complaints and development of hypersensitivity (difficult breathing, coughing, asthma) are possible. Hypersensitive persons may suffer from these effects even at low isocyanate concentrations including concentrations below the WEL (exposure limit). In case of longer contact with skin, tanning and irritating effects are possible.

12. ECOLOGICAL INFORMATION

Biodegradability: 0 % after 28 days

Acute fish toxicity: LC0 = > 1000 mg/l (96 hrs.)

Toxicity for daphnia: EC 50 = > 1000 mg/l (24 hrs.)

Acute bacteria toxicity: EC50 = > 100 mg/l (3 hrs.)

Other information: The product should not be discharged into drains, streams or soil.

13. DISPOSAL CONSIDERATIONS

Disposal methods: The product remnants are classified as chemical waste. Dispose of waste according to Local, State, Federal, and Provincial Environmental Regulations.

(European waste catalogue) EWC-code: 08 05 01 (waste isocyanates)

14. TRANSPORT INFORMATION

This preparation is not classified dangerous according to international transport regulations ADR/RID/IMDG/IATA.

15. REGULATORY INFORMATION

Labelling in accordance with the EU directives.

Symbol:

Hazard designation: Xn – harmful.

Contains: Diphenyl methane-diisocyanate, isomers and homologues

R-phrases: R20 – harmful by inhalation
R36/37/38 – Irritating to eyes, respiratory system and skin.
R42/43 – May cause sensitization by inhalation and skin contact.

S-phrases: S23 – Do not breathe vapour/spray.
S36/37 – Wear suitable protective clothing and gloves.
S45 – In case of accident or if you feel unwell, seek medical advice immediately.
(show the label where possible).

Any existing national regulations on the handling of isocyanates must be observed.

16. OTHER INFORMATION

Explanation to R-phrases in section 2: R20 – harmful by inhalation. R36/37/38 – Irritating to eyes, respiratory system and skin. R42/43 – May cause sensitization by inhalation and skin contact.

Revision date: 2008-05-13

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Signature: Gorilla Glue Europe A/S

The information of this SDS is based on the present state of our knowledge and on current EU laws. It is always the responsibility of the user to take all necessary steps in order to fulfil the demand laid down in the local rules and legislation. The information in this SDS is meant as a description of the safety requirements of our product. It is not to be considered as a guarantee of the products properties.