



SAFETY DATA SHEET GRIPTOP MD HARDENER

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

Product name GRIPTOP MD HARDENER
Internal Id GRIPTOPMDH/6

1.2. Relevant identified uses of the substance or mixture and uses advised against

Identified uses Component of polyurethane floor coating system

1.3. Details of the supplier of the safety data sheet

Supplier Don Construction Products Ltd.,
 Churnetside Business Park,
 Station Road,
 Cheddleton,
 Staffordshire ST13 7RS
 Tel: 01538 361799 Mon-Fri 08:30 - 17:00 (excl
 bank holidays)
 Fax: 01538 361899
 E-Mail: info@donconstruction.co.uk

1.4. Emergency telephone number

National Emergency Telephone Number
01538 361799 Mon-Fri 8.30am - 5.00pm (excluding Bank Holidays)

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

Classification (1999/45/EEC) Xn;R20, R48/20. Carc. Cat. 3;R40. R42/43. Xi;R36/37/38.

Human health

See section 11 for additional information on health hazards.

Environment

In the presence of water the product hardens to a solid mass which is not biodegradable.

2.2. Label elements

Contains DIPHENYLMETHANEDIISOCYANATE - ISOMERS & HOMOLOGUES

Labelling



Harmful

Risk Phrases

R20	Harmful by inhalation.
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.
R48/20	Harmful: danger of serious damage to health by prolonged exposure through inhalation.

Safety Phrases

S23	Do not breathe vapour/spray.
S25	Avoid contact with eyes.
S26	In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S36/37	Wear suitable protective clothing and gloves.
S38	In case of insufficient ventilation, wear suitable respiratory equipment.

GRIPTOP MD HARDENER

S45

In case of accident or if you feel unwell, seek medical advice immediately (show label where possible).

S60

This material and its container must be disposed of as hazardous waste.

P4

Contains isocyanates. See information supplied by the manufacturer.

2.3. Other hazards

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.2. Mixtures

DIPHENYLMETHANEDIISOCYANATE - ISOMERS & HOMOLOGUES		95-100 %
CAS-No.: 9016-87-9	EC No.:	
Classification (EC 1272/2008)	Classification (67/548/EEC)	
Acute Tox. 4 - H332	Xn;R20,R48/20.	
Skin Irrit. 2 - H315	Carc. Cat. 3;R40.	
Eye Irrit. 2 - H319	Xi;R36/37/38.	
Resp. Sens. 1 - H334	R42/43.	
Skin Sens. 1 - H317		
Carc. 2 - H351		
STOT SE 3 - H335		
STOT RE 2 - H373		

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

Composition Comments

Polyisocyanate pre-polymer

SECTION 4: FIRST AID MEASURES

4.1. Description of first aid measures

General information

Remove affected person from source of contamination.

Inhalation

Move the exposed person to fresh air at once. Get medical attention.

Ingestion

Rinse mouth thoroughly. Drink plenty of water. Do not induce vomiting. Get medical attention.

Skin contact

Remove contaminated clothing immediately and wash skin with soap and water. Get medical attention if irritation persists after washing.

Eye contact

Immediately rinse with water. Continue to rinse for at least 15 minutes and get medical attention.

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

General information

The severity of the symptoms described will vary dependant of the concentration and the length of exposure.

Inhalation.

Vapours may cause drowsiness and dizziness. May cause an asthma-like shortness of breath.

Ingestion

May cause discomfort if swallowed.

Skin contact

Skin irritation.

Eye contact

Irritation of eyes and mucous membranes.

4.3. Indication of any immediate medical attention and special treatment needed

Treat Symptomatically.

SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing media

Extinguishing media

Extinguish with foam, carbon dioxide or dry powder.

Unsuitable extinguishing media

DO NOT use water if avoidable.

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5.2. Special hazards arising from the substance or mixture

Hazardous combustion products

In case of fire, toxic gases (CO, CO₂, NO_x) may be formed. When heated, vapours/gases hazardous to health may be formed.

Unusual Fire & Explosion Hazards

No unusual fire or explosion hazards noted.

Specific hazards

In case of fire, toxic gases may be formed (CO_x, NO_x). Hydrogen cyanide (HCN).

5.3. Advice for firefighters

Special Fire Fighting Procedures

No specific fire fighting procedure given.

Protective equipment for fire-fighters

Self contained breathing apparatus and full protective clothing must be worn in case of fire.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Use protective gloves, goggles and suitable protective clothing. Avoid contact with skin and eyes. In case of inadequate ventilation, use respiratory protection.

6.2. Environmental precautions

Avoid discharge into drains, water courses or onto the ground.

6.3. Methods and material for containment and cleaning up

Dam and absorb spillage with damp sand, sawdust or other suitable absorbent material. Transfer to a container for disposal. Do not close container tightly. Risk of excess pressure build-up. Keep damp in a safe well ventilated area for several days.

6.4. Reference to other sections

For personal protection, see section 8. See section 11 for additional information on health hazards. For waste disposal, see section 13.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

Avoid contact with skin and eyes. Avoid inhalation of vapours. Provide good ventilation.

7.2. Conditions for safe storage, including any incompatibilities

Keep separate from food, feedstuffs, fertilisers and other sensitive material. Store in tightly closed original container in a dry, cool and well-ventilated place.

7.3. Specific end use(s)

The identified uses for this product are detailed in Section 1.2.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Name	STD	TWA - 8 Hrs		STEL - 15 Min		Notes
DIPHENYLMETHANEDIISOCYANATE - ISOMERS & HOMOLOGUES	WEL		0.02 mg/m ³ (Sen)		0.07 mg/m ³ (Sen)	

WEL = Workplace Exposure Limit.

8.2. Exposure controls

Process conditions

Use engineering controls to reduce air contamination to permissible exposure level. Provide eyewash station.

Engineering measures

Provide adequate general and local exhaust ventilation. Observe occupational exposure limits and minimize the risk of inhalation of vapours.

Respiratory equipment

In the case of hypersensitivity of the respiratory tract (eg asthmatics and those who suffer from chronic bronchitis) it is inadvisable to work with this product. In case of inadequate ventilation use a respirator suitable for organic vapours. Consult respirator manufacturer for specific advice.

Hand protection

Protective gloves should be used if there is a risk of direct contact or splash. Nitrile gloves to BSEN374 are recommended. Break through times can vary depending on thickness, use and source. Change gloves regularly.

Eye protection

If there is a risk of splashing, wear chemical resistant goggles or visor approved to BS EN166.

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Other Protection

Wear suitable protective clothing as protection against splashing or contamination.

Hygiene measures

When using do not eat, drink or smoke. Remove contaminated clothing and wash the skin thoroughly with soap and water after work.

Personal protection

Always check applicability with your supplier of protective equipment.

Skin protection

Wear apron or protective clothing in case of splashes.

Environmental Exposure Controls

Residues and empty containers should be taken care of as hazardous waste according to local and national provisions.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Appearance	Viscous liquid.
Colour	Dark. Brown.
Odour	Musty
Solubility	Immiscible with water
Initial boiling point and boiling range	>230
Relative density	1.2 approx @ 20 degC
pH-Value, Conc. Solution	N/A
Viscosity	3-5 Pas @25degC
Flash point	>200 CC (Closed cup).

9.2. Other information

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

The product will harden into a hard mass in contact with water and moisture.

10.2. Chemical stability

Stable under the prescribed storage conditions.

10.3. Possibility of hazardous reactions

Under normal conditions of storage and use, hazardous reactions will not occur.

Hazardous Polymerisation

Unknown.

10.4. Conditions to avoid

Water, moisture.

10.5. Incompatible materials

Materials To Avoid

Amines. Alcohols, glycols. Reacts with water forming carbon dioxide. Risk of bursting owing to increased pressure in closed containers.

10.6. Hazardous decomposition products

During fire, toxic gases (CO, CO₂, NO_x) are formed.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

General information

Preparation contains small volumes of isocyanate which may cause allergic reaction and irritation of respiratory system.

Inhalation

Harmful by inhalation. Vapours irritate the respiratory system, and may cause coughing and difficulties in breathing. May cause sensitisation by inhalation.

Ingestion

May cause discomfort if swallowed.

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Skin contact

Prolonged or repeated contact may lead to skin sensitisation

Eye contact

Irritation of eyes and mucous membranes.

Health Warnings

Prolonged exposure to the preparation may cause serious health effects.

Route of entry

Inhalation. Skin and/or eye contact.

Target Organs

Eyes Respiratory system, lungs Skin

Medical Symptoms

Skin irritation. Irritation of eyes and mucous membranes. High concentrations of vapours may irritate respiratory system and lead to headache, fatigue, nausea and vomiting. Prolonged or repeated exposure may cause: Allergic rash. General respiratory distress, unproductive cough. Difficulty in breathing.

Medical Considerations

Skin disorders and allergies. Pre-existing eye problems. Chronic respiratory and obstructive airway diseases.

Specific effects

Frequent inhalation of vapours, may cause respiratory allergy.

Toxicological information on ingredients.

DIPHENYLMETHANEDIISOCYANATE - ISOMERS & HOMOLOGUES (CAS: 9016-87-9)

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity

The product should not be allowed to enter drains, sewers or watercourses.

12.1. Toxicity

Not available

Acute Fish Toxicity

Not measured. Do not allow to enter waterways or drains

12.2. Persistence and degradability

Degradability

The product reacts with water to form a solid insoluble reaction product which is non-degradable, according to information available.

12.3. Bioaccumulative potential

Bioaccumulative potential

No data available on bioaccumulation.

12.4. Mobility in soil

Mobility:

The product is non-volatile.

12.5. Results of PBT and vPvB assessment

Not Classified as PBT/vPvB by current EU criteria.

12.6. Other adverse effects

None known.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Should be disposed of as hazardous waste via a licensed waste operator.

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Waste Class

Hazardous Waste Code for Product : 080501* ; Contaminated empty container: 150110*

SECTION 14: TRANSPORT INFORMATION

General The product is not covered by international regulation on the transport of dangerous goods (IMDG, IATA, ADR/RID).

14.1. UN number

14.2. UN proper shipping name

14.3. Transport hazard class(es)

ADR/RID/ADN Class Not classified for transportation.

Transport Labels

No transport warning sign required.

14.4. Packing group

14.5. Environmental hazards

Environmentally Hazardous Substance/Marine Pollutant

No.

14.6. Special precautions for user

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

SECTION 15: REGULATORY INFORMATION

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

Uk Regulatory References

The Control of Substances Hazardous to Health Regulations 2002 (S.I 2002 No. 2677) with amendments.

Environmental Listing

No listing noted.

Approved Code Of Practice

Safety Data Sheets for Substances and Preparations.

Guidance Notes

Workplace Exposure Limits EH40.

National Regulations

Control of Substances Hazardous to Health Regulations 2002 (as amended)

Authorisations (Title VII Regulation 1907/2006)

No specific authorisations are noted for this product.

Restrictions (Title VIII Regulation 1907/2006)

No specific restrictions of use are noted for this product.

15.2. Chemical Safety Assessment

No chemical safety assessment has been carried out.

SECTION 16: OTHER INFORMATION

General information

Don Construction Products Ltd. Technical Datasheet.

Information Sources

Health and Safety Executive Guidance Note EH40 (amended annually). Workplace Exposure Limits.

Revision Comments

New Format

Revision Date 23/01/13

Revision 6

Supersedes date 07/01/10

Safety Data Sheet Status Approved.

GRIPTOP MD HARDENER

Risk Phrases In Full

R20	Harmful by inhalation.
R48/20	Harmful: danger of serious damage to health by prolonged exposure through inhalation.
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.

Hazard Statements In Full

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

Disclaimer

This 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. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty, guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.