

# SAFETY DATA SHEET **GRIPTOP COVE PACK SEAL HARDENER**

### SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

GRIPTOP COVE PACK SEAL HARDENER Product name

Internal identification **GRIPTOPCPSH/8** 

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

Identified uses Component of polyurethane floor coating system

Uses advised against No specific uses advised against are identified.

1.3. Details of the supplier of the safety data sheet

Supplier

Don Construction Products Ltd.,

Hawthorn House

Helions Bumpstead Road

Haverhill Suffolk **CB9 7AA** 

Tel: 01538 361799 Mon-Fri 08:30 - 17:00 (excl bank holidays)

Fax: 01538 361899

E-Mail: info.uk@dcp-int.com

1.4. Emergency telephone number

01538 361799 Mon-Fri 8.30am - 5.00pm (excluding Bank Holidays) **Emergency telephone** 

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (EC 1272/2008)

Physical hazards Not Classified

Health hazards Acute Tox. 4 - H332 Skin Irrit. 2 - H315 Eye Irrit. 2 - H319 Resp. Sens. 1 - H334 Skin Sens. 1

- H317 Carc. 2 - H351 STOT SE 3 - H335 STOT RE 2 - H373

**Environmental hazards** Not Classified

Classification (67/548/EEC or Xn; R20, R48/20/21/22. Xi; R36/37/38. Carc. Cat. 3 R40. R42/43

1999/45/EC)

Human health See Section 11 for additional information on health hazards. May cause sensitisation by

inhalation.

**Environmental** The product will harden into a solid mass in contact with water and moisture. The resultant

material is not biodegradable.

2.2. Label elements

## **GRIPTOP COVE PACK SEAL HARDENER**

### **Pictogram**





## Signal word Danger

Hazard statements H315 Causes skin irritation.

H317 May cause an allergic skin reaction. H319 Causes serious eye irritation.

H332 Harmful if inhaled.

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.

**Precautionary statements** P260 Do not breathe vapour/ spray.

P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.

P284 [In case of inadequate ventilation] wear respiratory protection.

P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing.

Rinse skin with water/ shower.

P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing. P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove

contact lenses, if present and easy to do. Continue rinsing.

P313 Get medical advice/ attention.

Contains METHYLENEDIPHENYL DIISOCYANATE, DIPHENYLMETHANEDIISOCYANATE -

**ISOMERS & HOMOLOGUES** 

Supplementary precautionary

statements

P264 Wash contaminated skin thoroughly after handling. P270 Do not eat, drink or smoke when using this product.

P271 Use only outdoors or in a well-ventilated area.

P403+P233 Store in a well-ventilated place. Keep container tightly closed. P501 Dispose of contents/ container in accordance with local regulations.

### 2.3. Other hazards

## SECTION 3: Composition/information on ingredients

## 3.2. Mixtures

## METHYLENEDIPHENYL DIISOCYANATE 60-100%

## Classification Classification (67/548/EEC or 1999/45/EC)

Acute Tox. 4 - H332 Carc. Cat. 3;R40 Xn;R20,R48/20 Xi;R36/37/38 R42/43

Skin Irrit. 2 - H315 Eye Irrit. 2 - H319 Resp. Sens. 1 - H334 Skin Sens. 1 - H317 Carc. 2 - H351 STOT SE 3 - H335

STOT RE 2 - H373

## **GRIPTOP COVE PACK SEAL HARDENER**

**DIPHENYLMETHANEDIISOCYANATE - ISOMERS &** 

10-30%

**HOMOLOGUES** 

CAS number: 9016-87-9

Classification Classification (67/548/EEC or 1999/45/EC)

Xn;R20,R48/20. Carc. Cat. 3;R40. Xi;R36/37/38. R42/43.

Acute Tox. 2 - H330 Skin Irrit. 2 - H315 Eye Irrit. 2 - H319 Resp. Sens. 1 - H334

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 affected person to fresh air at once. Get medical attention.

**Ingestion** Rinse mouth thoroughly with water. Give plenty of water to drink. 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 Rinse immediately with plenty of 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 dependent on the concentration and the

length of exposure.

Inhalation Harmful if inhaled. May cause respiratory irritation. May cause allergy or asthma symptoms or

breathing difficulties if inhaled.

**Ingestion** May cause discomfort if swallowed.

**Skin contact** Skin irritation. May cause an allergic skin reaction.

**Eye contact** Irritation of eyes and mucous membranes.

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

Notes for the doctor Treat symptomatically.

### SECTION 5: Firefighting measures

### 5.1. Extinguishing media

**Suitable extinguishing media** Extinguish with foam, carbon dioxide or dry powder.

Unsuitable extinguishing

Do not use water, if avoidable.

media

## 5.2. Special hazards arising from the substance or mixture

### **GRIPTOP COVE PACK SEAL HARDENER**

Specific hazards Oxides of carbon. Oxides of nitrogen. Hydrogen cyanide (HCN).

Hazardous combustion

Oxides of carbon. Oxides of nitrogen. When heated, vapours/gases hazardous to health may

products

be formed.

5.3. Advice for firefighters

Protective actions during

firefighting

No specific firefighting precautions known.

Special protective equipment

for firefighters

Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective

clothing.

#### SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions Wear suitable protective equipment, including gloves, goggles/face shield, respirator, boots,

clothing or apron, as appropriate. Use suitable respiratory protection if ventilation is

inadequate. Avoid contact with skin and eyes.

### 6.2. Environmental precautions

**Environmental precautions** Avoid discharge into drains or watercourses or onto the ground.

### 6.3. Methods and material for containment and cleaning up

Methods for cleaning up Contain spillage with sand, earth or other suitable non-combustible material. Containers with

collected spillage must be properly labelled with correct contents and hazard symbol. Do not

close container tightly. Risk of excess pressure build-up.

### 6.4. Reference to other sections

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

**Usage precautions** Avoid inhalation of vapours. Provide adequate ventilation.

Advice on general Do not eat, drink or smoke when using this product. Good personal hygiene procedures

occupational hygiene should be implemented.

#### 7.2. Conditions for safe storage, including any incompatibilities

Storage precautions 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)

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

### Occupational exposure limits

## METHYLENEDIPHENYL DIISOCYANATE

Long-term exposure limit (8-hour TWA): WEL 0.02 mg/m3(Sen) Short-term exposure limit (15-minute): WEL 0.07 mg/m3(Sen)

## DIPHENYLMETHANEDIISOCYANATE - ISOMERS & HOMOLOGUES

Long-term exposure limit (8-hour TWA): WEL 0.02 mg/m3(Sen) Short-term exposure limit (15-minute): WEL 0.07 mg/m3(Sen)

## **GRIPTOP COVE PACK SEAL HARDENER**

WEL = Workplace Exposure Limit

#### 8.2. Exposure controls

Appropriate engineering

controls

Provide adequate general and local exhaust ventilation. Avoid inhalation of vapours. Observe

any occupational exposure limits for the product or ingredients.

Personal protection Always check applicability with your supplier of protective equipment.

**Eye/face protection** If there is a risk of splashing, wear chemical resistant goggles or visor approved to BS EN166.

Hand protection Chemical-resistant, impervious gloves complying with an approved standard should be worn if

a risk assessment indicates skin contact is possible. Nitrile gloves to BSEN374 are recommended. Break through times can vary depending on thickness, use and source.

Change gloves regularly.

Other skin and body

protection

Wear suitable protective clothing as protection against splashing or contamination. Wear

apron or protective clothing in case of contact.

Hygiene measures

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

eyewash station. Remove contaminated clothing and wash the skin thoroughly with soap and

water after work. Do not eat, drink or smoke when using this product.

**Respiratory protection** In the case of hypersensitivity of the respiratory tract (eg asthmatics and those who suffer

from chronic bronchitis) it is inadviseable to work with this product. In case of inadequate ventilation use a respirator suitable for organic vapours. Consult respirator manufacturer for

specific advice.

**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 Mild.

Odour threshold Not determined.

**pH** Not applicable.

Melting point Not applicable.

Initial boiling point and range 200°C @

Flash point >200°C CC (Closed cup).

Evaporation rate Not applicable.

Evaporation factor Not applicable.

Flammability (solid, gas) Not applicable.

Upper/lower flammability or

explosive limits

Not applicable.

Other flammability

Vapour pressure

Vapour density

Not applicable.

<0.01 Pa @ °C

Vapour density

Not determined.

Relative density 1.2 approx @ 20°C

## **GRIPTOP COVE PACK SEAL HARDENER**

Bulk density Not determined.

**Solubility(ies)** Reacts with water.

Partition coefficient Not applicable.

Auto-ignition temperature Not applicable.

**Decomposition Temperature** Not applicable.

**Explosive properties** Not applicable.

Explosive under the influence

of a flame

Not considered to be explosive.

Oxidising properties Not known.

**Comments** Information given is applicable to the product as supplied.

9.2. Other information

Other information None.

Refractive index Not determined.

Particle size Not applicable.

Molecular weight Not determined.

Volatility Not determined.

Saturation concentration Not determined.

Critical temperature Not determined.

Volatile organic compound Not determined.

## SECTION 10: Stability and reactivity

## 10.1. Reactivity

Reactivity The product will harden into a solid mass in contact with water and moisture. Reactions with

the following materials may generate heat: Acids. Alcohols, glycols. Amines.

10.2. Chemical stability

**Stability** Stable under the prescribed storage conditions.

## 10.3. Possibility of hazardous reactions

Possibility of hazardous

Under normal conditions of storage and use, hazardous reactions will not occur. No potentially

hazardous reactions known.

10.4. Conditions to avoid

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

Hazardous decomposition Oxides of carbon. Oxides of nitrogen.

products

reactions

## **SECTION 11: Toxicological information**

### **GRIPTOP COVE PACK SEAL HARDENER**

## 11.1. Information on toxicological effects

**Toxicological effects** No information available.

Acute toxicity - oral

Notes (oral LD<sub>50</sub>) No specific test data are available.

Acute toxicity - dermal

Notes (dermal LD<sub>50</sub>) No specific test data are available.

Acute toxicity - inhalation

Notes (inhalation LC<sub>50</sub>) No specific test data are available.

ATE inhalation (vapours mg/l) 12.22

Skin corrosion/irritation

**Skin corrosion/irritation** Irritating to skin.

Animal data No specific test data are available.

Human skin model test No specific test data are available.

**Extreme pH** No specific test data are available.

Serious eye damage/irritation

Serious eye damage/irritation Irritation of eyes is assumed.

Respiratory sensitisation

Respiratory sensitisation Sensitising.

Skin sensitisation

Skin sensitisation Sensitising.

Germ cell mutagenicity

**Genotoxicity - in vitro**No specific test data are available.

Genotoxicity - in vivo No specific test data are available.

Carcinogenicity

**Carcinogenicity** Suspected of causing cancer.

**Target organ for** No specific target organs known. **carcinogenicity** 

IARC carcinogenicity Not listed.

Reproductive toxicity

Reproductive toxicity - fertility No specific test data are available.

Reproductive toxicity -

development

Not considered to be toxic to the reproductive system.

Specific target organ toxicity - single exposure

STOT - single exposure No specific test data are available.

Specific target organ toxicity - repeated exposure

**STOT - repeated exposure** May cause damage to organs through prolonged or repeated exposure.

General information The product contains small quantities of isocyanate. May cause respiratory allergy. May

cause respiratory system irritation.

## **GRIPTOP COVE PACK SEAL HARDENER**

Inhalation Harmful by inhalation. Vapours irritate the respiratory system. May cause coughing and

difficulties in breathing. May cause sensitisation by inhalation.

**Ingestion** May cause discomfort if swallowed.

Skin contact Prolonged or repeated contact may lead to skin sensitisation

**Eye contact** Irritation of eyes and mucous membranes.

Acute and chronic health

hazards

Prolonged exposure to the preparation may cause serious health effects. Frequent inhalation of vapours may cause respiratory allergy. Suspected of causing cancer. May cause damage to organs through prolonged or repeated exposure. May cause allergic contact eczema.

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. Gas or vapour in high concentrations

may irritate the respiratory system. Symptoms following overexposure may include the following: Headache. Fatigue. Nausea, vomiting. Prolonged or repeated exposure may cause the following adverse effects: Allergic rash. General respiratory distress, unproductive cough.

Difficulty in breathing.

11.0

Medical considerations Skin disorders and allergies. Pre-existing eye problems. Chronic respiratory and obstructive

airway diseases.

## METHYLENEDIPHENYL DIISOCYANATE

Acute toxicity - inhalation

ATE inhalation (vapours

mg/l)

DIPHENYLMETHANEDIISOCYANATE - ISOMERS & HOMOLOGUES

Acute toxicity - oral

Acute toxicity oral (LD₅o

10,000.0

mg/kg)

Species Rat

ATE oral (mg/kg) 10,000.0

Acute toxicity - dermal

Acute toxicity dermal (LD<sub>50</sub> 9,400.0

mg/kg)

Species Rabbit

**ATE dermal (mg/kg)** 9,400.0

Acute toxicity - inhalation

Acute toxicity inhalation

(LC<sub>50</sub> vapours mg/l)

0.31

**Species** Rat

Acute toxicity inhalation

(LC<sub>50</sub> dust/mist mg/l)

0.31

Species Rat

## **GRIPTOP COVE PACK SEAL HARDENER**

ATE inhalation

(dusts/mists mg/l)

0.31

Skin corrosion/irritation

**Skin corrosion/irritation** Based on available data the classification criteria are not met.

Animal data Slightly irritating.

Germ cell mutagenicity

**Genotoxicity - in vitro** Ames test: Negative.

Carcinogenicity

Carcinogenicity Dose level: 0-0.2, 1-6 mg/m³, Inhalation, Rat

Target organ for carcinogenicity

Respiratory system, lungs

Reproductive toxicity

Reproductive toxicity -

fertility

No specific test data are available.

Reproductive toxicity -

development

Teratogenicity: - NOAEL: 12 mg/m³, Inhalation, Rat Maternal toxicity: - NOAEL: 4 mg/m³, Inhalation, Rat Developmental toxicity: - NOAEL: 4 mg/m³, Inhalation, Rat

Specific target organ toxicity - single exposure

STOT - single exposure , Inhalation, A single exposure may cause the following adverse effects: Asthma,

pulmonary sensitisation.

Target organs Respiratory tract

Specific target organ toxicity - repeated exposure

STOT - repeated exposure , Inhalation, High concentrations may cause severe lung damage.

Target organs Respiratory tract

Aspiration hazard

Aspiration hazard Not relevant.

## SECTION 12: Ecological Information

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

12.1. Toxicity

**Toxicity** Not measured. Do not allow to enter waterways or drains

Acute toxicity - fish Not determined

Acute toxicity - aquatic

invertebrates

Not determined.

Acute toxicity - aquatic plants Not determined.

Acute toxicity - Not determined.

microorganisms

Acute toxicity - terrestrial Not determined.

Chronic toxicity - fish early life Not determined.

stage

### **GRIPTOP COVE PACK SEAL HARDENER**

Short term toxicity - embryo

and sac fry stages

Not determined.

Chronic toxicity - aquatic

invertebrates

Not determined.

### DIPHENYLMETHANEDIISOCYANATE - ISOMERS & HOMOLOGUES

Acute toxicity - fish LC<sub>50</sub>, 96 hours: >1000 mg/l, Brachydanio rerio (Zebra Fish)

Acute toxicity - aquatic

invertebrates

EC<sub>50</sub>, 24 hours: >1000 mg/l, Daphnia magna

Acute toxicity - aquatic

plants

, 72 hours: >1640 mg/l, Scenedesmus subspicatus

Acute toxicity -

microorganisms

EC<sub>50</sub>, 3 hours: >100 mg/l, Activated sludge

Acute toxicity - terrestrial NOEC, 14 days: >1000 mg/kg, Eisenia Fetida (Earthworm)

Chronic toxicity - aquatic

invertebrates

NOEC, 21 days: >10 mg/l, Daphnia magna

## 12.2. Persistence and degradability

Persistence and degradability The product reacts with water to form a solid, insoluble reaction product which is not

biodegradable.

Phototransformation Not determined.

Stability (hydrolysis) Not determined.

**Biodegradation** Not readily biodegradable.

Biological oxygen demand Not determined.

Chemical oxygen demand Not determined.

### **DIPHENYLMETHANEDIISOCYANATE - ISOMERS & HOMOLOGUES**

Persistence and degradability

Not readily biodegradable.

Stability (hydrolysis)

Reacts with water.

### 12.3. Bioaccumulative potential

Bioaccumulative potential No data available on bioaccumulation.

Partition coefficient Not applicable.

## DIPHENYLMETHANEDIISOCYANATE - ISOMERS & HOMOLOGUES

Bioaccumulative potential BCF: < 14, Cyprinus carpio (Common carp)

12.4. Mobility in soil

Mobility The product is non-volatile.

Adsorption/desorption

coefficient

Not determined.

### **GRIPTOP COVE PACK SEAL HARDENER**

Henry's law constant Not determined.

Surface tension Not determined.

### 12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB

assessment

This substance is not classified as PBT or vPvB according to current EU criteria.

# DIPHENYLMETHANEDIISOCYANATE - ISOMERS & HOMOLOGUES

**Results of PBT and vPvB** This substance is not classified as PBT or vPvB according to current EU criteria. assessment

### 12.6. Other adverse effects

Other adverse effects None known.

## **SECTION 13: Disposal considerations**

### 13.1. Waste treatment methods

General information Residues and empty containers should be taken care of as hazardous waste according to

local and national provisions.

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

## **SECTION 14: Transport information**

General The product is not covered by international regulations 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)

### 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 MARPOL and the IBC Code

## **SECTION 15: Regulatory information**

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

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

Guidance Workplace Exposure Limits EH40.

Safety Data Sheets for Substances and Preparations.

Authorisations (Title VII

Regulation 1907/2006)

No specific authorisations are known for this product.

Restrictions (Title VIII Regulation 1907/2006)

No specific restrictions on use are known for this product.

### **GRIPTOP COVE PACK SEAL HARDENER**

### 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.

Key literature references and sources for data

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

Limits

Revision comments Section 1 update

Revision date 01/03/2017

Revision 8

Supersedes date 31/05/2016 SDS status Approved.

Risk phrases in full 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.

Hazard statements in full H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H319 Causes serious eye irritation.

H332 Harmful if inhaled.

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.

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.