

# Safety data sheet

acc. (EC) 1907/2006, as amended by UK SI 2019/758

Printing date 11.08.2022

Version number 3

Revision: 11.08.2022

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

### · 1.1 Product identifier

· Trade name: **TREMCO RW451 B**

· MSDS code: W-T-RW451B

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

No further relevant information available.

### · Application of the substance / the mixture

Roof coating

Hardening agent/ Curing agent

### · 1.3 Details of the supplier of the safety data sheet

#### · Manufacturer/Supplier:

Tremco CPG UK Ltd

Coupland Road, Hindley Green, Wigan, WN2 4HT

Tel: +44 (0) 1942251400, Fax: +44 (0) 1942251410

msds@cpg-europe.com

#### · Further information obtainable from:

Tremco CPG UK Ltd

Coupland Road, Hindley Green, Wigan, WN2 4HT

T: +44 (0) 1942251400, F: +44 (0) 1942251410

www.cpg-europe.com, info.uk@cpg-europe.com

### · 1.4 Emergency telephone number:

During office hours tel.: +44 (0) 1942251400. At all other times it is recommended to call NHS 111 (England/Wales/Scotland), your local GP/pharmacist (NI), 01 809 2166 (ROI), or otherwise to contact a doctor.

## SECTION 2: Hazards identification

### · 2.1 Classification of the substance or mixture

#### · Classification according to Regulation (EC) No 1272/2008

Acute Tox. 3 H331 Toxic if inhaled.

Skin Sens. 1 H317 May cause an allergic skin reaction.

STOT SE 3 H335 May cause respiratory irritation.

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### · 2.2 Label elements

#### · Labelling according to Regulation (EC) No 1272/2008

The product is classified and labelled according to the GB CLP regulation.

#### · Hazard pictograms



GHS06

#### · Signal word Danger

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GB

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**· Contains:**

Hexamethylene diisocyanate, oligomerisation product (uretdione type)

**· Hazard statements**

H331 Toxic if inhaled.

H317 May cause an allergic skin reaction.

H335 May cause respiratory irritation.

**· Precautionary statements**

P260 Do not breathe vapours.

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

P284 In case of inadequate ventilation wear respiratory protection.

P302+P352 IF ON SKIN: Wash with plenty of water.

P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P333+P313 If skin irritation or rash occurs: Get medical advice/attention.

P403+P233 Store in a well-ventilated place. Keep container tightly closed.

**· Supplemental information:**

EUH204 Contains isocyanates. May produce an allergic reaction.

As from 24 August 2023 adequate training is required before industrial or professional use.

**· 2.3 Other hazards****· Results of PBT and vPvB assessment****· PBT:** Not applicable.**· vPvB:** Not applicable.**SECTION 3: Composition/information on ingredients****· 3.2 Mixtures****· Description:** EC 931-288-4**· Dangerous components:**

CAS: 28182-81-2	Hexamethylene diisocyanate, oligomerisation product (uretdione type)	75-<100%
NLP: 500-060-2	Acute Tox. 3, H331; Skin Sens. 1, H317; STOT SE 3, H335	
CAS: 822-06-0	hexamethylene-di-isocyanate	<0.1%
	Acute Tox. 1, H330; Resp. Sens. 1, H334; Acute Tox. 4, H302; Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1, H317; STOT SE 3, H335	

**· SVHC -****· Additional information:** For the wording of the listed hazard phrases refer to section 16.**SECTION 4: First aid measures****· 4.1 Description of first aid measures****· General information:**

Take affected persons out of danger area and lay down.

Immediately remove any clothing soiled by the product.

In case of accident or if you feel unwell, seek medical advice (show this safety data sheet if possible).

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

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- **After inhalation:**  
Supply fresh air or oxygen; call for doctor.  
In case of unconsciousness place patient stably in side position for transportation.
- **After skin contact:**  
Immediately wash with water and soap and rinse thoroughly.  
If skin irritation continues, consult a doctor.
- **After eye contact:**  
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
If symptoms persist consult doctor.
- **After swallowing:**  
IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.  
Seek medical treatment.
- **Information for doctor:** No further relevant information available.
- **4.2 Most important symptoms and effects, both acute and delayed**  
Toxic if inhaled.  
Persons already sensitised to diisocyanates may develop allergic reactions when using this product.  
Irritating to eyes, respiratory system and skin.  
Prolonged skin contact may cause redness and irritation.  
May cause an allergic skin reaction.
- **Hazards** No further relevant information available.
- **4.3 Indication of any immediate medical attention and special treatment needed**  
No further relevant information available.

## SECTION 5: Firefighting measures

- **5.1 Extinguishing media**
- **Suitable extinguishing agents:**  
CO<sub>2</sub>, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.  
Use fire extinguishing methods suitable to surrounding conditions.
- **For safety reasons unsuitable extinguishing agents:** Water with full jet
- **5.2 Special hazards arising from the substance or mixture**  
Formation of toxic gases is possible during heating or in case of fire.  
Carbon dioxide (CO<sub>2</sub>)  
Carbon monoxide (CO)  
Hydrogen cyanide (HCN)  
Nitrogen oxides (NO<sub>x</sub>)  
Isocyanate
- **5.3 Advice for firefighters**
- **Protective equipment:**  
Wear self-contained respiratory protective device.  
Wear fully protective suit.
- **Additional information**  
Cool endangered receptacles with water spray.  
Do not allow water to get inside the containers.

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Danger of bursting.

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**SECTION 6: Accidental release measures**

- **6.1 Personal precautions, protective equipment and emergency procedures**

Ensure adequate ventilation.

Keep people at a distance and stay on the windward side.

Wear protective clothing.

- **6.2 Environmental precautions:**

Do not allow to enter sewers/ surface or ground water.

Inform respective authorities in case of seepage into water course or sewage system.

- **6.3 Methods and material for containment and cleaning up:**

Ensure adequate ventilation.

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Dispose of contaminated material as waste according to Section 13.

- **6.4 Reference to other sections**

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

**SECTION 7: Handling and storage**

- **7.1 Precautions for safe handling**

Ensure good ventilation/exhaustion at the workplace.

Do not handle until all safety precautions have been read and understood.

Do not breathe vapour.

Avoid contact with the eyes and skin.

Do not eat, drink, smoke or sniff while working.

Wear suitable protective clothing and gloves.

The usual precautionary measures are to be adhered to when handling chemicals.

Prevent formation of aerosols.

- **Information about fire - and explosion protection:** The product is not flammable.

- **7.2 Conditions for safe storage, including any incompatibilities**

- **Storage:**

- **Requirements to be met by storerooms and receptacles:**

Store only in unopened original receptacles.

Store locked up.

- **Information about storage in one common storage facility:** Protect from heat and direct sunlight.

- **Further information about storage conditions:**

Store in cool, dry conditions in well sealed receptacles.

Storage temperature: +15°C to 25°C

- **7.3 Specific end use(s)** No further relevant information available.

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### SECTION 8: Exposure controls/personal protection

#### · 8.1 Control parameters

#### · **Ingredients with limit values that require monitoring at the workplace:**

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

#### · **Additional information:**

The lists valid during the making were used as basis.

HSE EH40/2005 Workplace Exposure Limits (as amended)

#### · 8.2 Exposure controls

#### · **Personal protective equipment:**

#### · **General protective and hygienic measures:**

Ensure good interior ventilation, especially at floor level. (Fumes are heavier than air).

The usual precautionary measures are to be adhered to when handling chemicals.

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing

Wash hands before breaks and at the end of work.

Avoid contact with the eyes and skin.

Do not breathe vapour.

Ensure that washing facilities are available at the work place.

#### · **Respiratory protection:**

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.

Fresh air mask

Take note of emission threshold.

Isocyanate

Use only in well-ventilated areas.

For further guidance,

please refer to HSE HSG53 "Respiratory Protective Equipment at work - A Practical Guide".

#### · **Protection of hands:**



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

#### · **Material of gloves**

Butyl rubber, BR

Recommended thickness of the material:  $\geq 0.5$  mm

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

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- **Penetration time of glove material**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

>60 min

- **Eye protection:**



Tightly sealed goggles

- **Body protection:**



Protective work clothing

## SECTION 9: Physical and chemical properties

- **9.1 Information on basic physical and chemical properties**

- **General Information**

- **Appearance:**

Form:	Liquid
Colour:	Light yellow
Odour:	Mild

- **pH-value:** Not determined.

- **Melting point/freezing point:** Undetermined.

- **Flash point:** 174 °C

- **Auto-ignition temperature:** Product is not selfigniting.

- **Explosive properties:** Product is not explosive. However, formation of explosive air/vapour mixtures are possible. Ensure good interior ventilation, especially at floor level. (Fumes are heavier than air).

- **Density at 20 °C:** 1.13 g/cm<sup>3</sup>

- **Solubility in / Miscibility with water:** Fully miscible.

- **Viscosity:**  
Dynamic at 20 °C: 2,500 - 5,500 mPas

- **Solvent content:**  
VOC (EU) 6 g/L  
VOC (EC) 0.10 %

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· **9.2 Other information** No further relevant information available.

## SECTION 10: Stability and reactivity

- **10.1 Reactivity** Stable
- **10.2 Chemical stability**
- **Thermal decomposition / conditions to be avoided:**  
No decomposition if used according to specifications.
- **10.3 Possibility of hazardous reactions**  
Reacts with alcohols, amines, aqueous acids and alkalis.  
Exothermic reaction.
- **10.4 Conditions to avoid**  
Keep away from heat.  
Water / moisture.  
Danger of bursting.
- **10.5 Incompatible materials:** No further relevant information available.
- **10.6 Hazardous decomposition products:**  
Formation of toxic gases is possible during heating or in case of fire.  
Carbon monoxide and carbon dioxide  
Nitrogen oxides  
Hydrogen cyanide (prussic acid)  
Isocyanate

## SECTION 11: Toxicological information

- **11.1 Information on toxicological effects**
- **Acute toxicity**  
Toxic if inhaled.

· **LD/LC50 values relevant for classification:**

**CAS: 822-06-0 hexamethylene-di-isocyanate**

Oral	LD50	738 mg/kg (rat)
Dermal	LD50	>7,000 mg/kg (rat)
Inhalative	LC50/4 h	0.124 mg/L (rat) (OESO 403)

- **Primary irritant effect:**
- **Skin corrosion/irritation** Irritating effect.
- **Serious eye damage/irritation** Irritating effect.
- **Respiratory or skin sensitisation**  
May cause an allergic skin reaction.
- **Additional toxicological information:** Irritating to eyes, respiratory system and skin.
- **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**
- **Germ cell mutagenicity** Based on available data, the classification criteria are not met.
- **Carcinogenicity** Based on available data, the classification criteria are not met.
- **Reproductive toxicity** Based on available data, the classification criteria are not met.

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- **STOT-single exposure**  
May cause respiratory irritation.
- **STOT-repeated exposure** Based on available data, the classification criteria are not met.
- **Aspiration hazard** Based on available data, the classification criteria are not met.

## SECTION 12: Ecological information

- **12.1 Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **12.2 Persistence and degradability** No further relevant information available.
- **12.3 Bioaccumulative potential** No further relevant information available.
- **12.4 Mobility in soil** No further relevant information available.
- **Additional ecological information:**
- **General notes:**  
Do not allow product to reach ground water, water course or sewage system, even in small quantities.
- **12.5 Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **12.6 Other adverse effects** No further relevant information available.

## SECTION 13: Disposal considerations

- **13.1 Waste treatment methods**
- **Recommendation**  
Disposal must be made according to official regulations.  
Must not be disposed together with household garbage. Do not allow product to reach sewage system.

### · **European waste catalogue**

08 01 11*	waste paint and varnish containing organic solvents or other hazardous substances
HP5	Specific Target Organ Toxicity (STOT)/Aspiration Toxicity
HP13	Sensitising

- **Uncleaned packaging:**
- **Recommendation:**  
Dispose of packaging according to regulations on the disposal of packagings.  
Empty contaminated packagings thoroughly. They may be recycled after thorough and proper cleaning.  
Packagings that may not be cleansed are to be disposed of in the same manner as the product.

## SECTION 14: Transport information

- |  |      |
|--|------|
| <ul style="list-style-type: none"> <li>· <b>14.1 UN-Number</b></li> <li>· <b>ADR, ADN, IMDG, IATA</b></li> </ul>               | Void |
| <ul style="list-style-type: none"> <li>· <b>14.2 UN proper shipping name</b></li> <li>· <b>ADR, ADN, IMDG, IATA</b></li> </ul> | Void |

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· <b>14.3 Transport hazard class(es)</b>	
· <b>ADR, ADN, IMDG, IATA</b>	
· <b>Class</b>	Void
· <b>14.4 Packing group</b>	
· <b>ADR, IMDG, IATA</b>	Void
· <b>14.5 Environmental hazards:</b>	Not applicable.
· <b>14.6 Special precautions for user</b>	Not applicable.
· <b>14.7 Transport in bulk according to Annex II of Marpol and the IBC Code</b>	Not applicable.
· <b>UN "Model Regulation":</b>	Void

### SECTION 15: Regulatory information

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**  
 "EU-GB CLP" Regulation (EC) No 1272/2008 (OJ L 353, 31.12.2008, p.1)  
 "EU-UK REACH" Regulation (EC) No 1907/2006 (OJ L 396, 30.12.2006, p.1, with subsequent amendments)  
 COMMISSION REGULATION (EU) 2020/878 of 18 June 2020.  
 HSE EH40/2005 Workplace Exposure Limits (as amended)  
 Guidance on the classification and assessment of waste | Technical Guidance WM3 (1st edition 2015)  
 "GB- CLP" The Chemicals (Health and Safety) and Genetically Modified Organisms (Contained Use) (Amendment etc.) (EU Exit) Regulations 2019  
 "UK- REACH" The UK REACH etc. (Amendment etc.) (EU Exit) Regulations 2020
- **Directive 2012/18/EU**
- **Named dangerous substances - ANNEX I** None of the ingredients is listed.
- **REGULATION (EC) No 1907/2006 ANNEX XVII** Conditions of restriction: 3

#### · **DIRECTIVE 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment – Annex II**

None of the ingredients is listed.

#### · **REGULATION (EU) 2019/1148**

#### · **Annex I - RESTRICTED EXPLOSIVES PRECURSORS (Upper limit value for the purpose of licensing under Article 5(3))**

None of the ingredients is listed.

#### · **Annex II - REPORTABLE EXPLOSIVES PRECURSORS**

None of the ingredients is listed.

#### · **Regulation (EC) No 273/2004 on drug precursors**

None of the ingredients is listed.

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· **Regulation (EC) No 111/2005 laying down rules for the monitoring of trade between the Community and third countries in drug precursors**

None of the ingredients is listed.

- **National regulations:**
- **Information about limitation of use:** Employment restrictions concerning juveniles must be observed.
- **Other regulations, limitations and prohibitive regulations** No further relevant information available.
- **Substances of very high concern (SVHC) according to REACH, Article 57** Not applicable.
- **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

### SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· **Relevant phrases**

H302 Harmful if swallowed.  
 H315 Causes skin irritation.  
 H317 May cause an allergic skin reaction.  
 H319 Causes serious eye irritation.  
 H330 Fatal if inhaled.  
 H331 Toxic if inhaled.  
 H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.  
 H335 May cause respiratory irritation.

· **Department issuing SDS:**

Prepared and verified in accordance with "UK REACH" Regulation (EC) No 1907/2006, Annex II, Part A, 0.2.3.

· **Abbreviations and acronyms:**

ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)  
 IMDG: International Maritime Code for Dangerous Goods  
 IATA: International Air Transport Association  
 GHS: Globally Harmonised System of Classification and Labelling of Chemicals  
 EINECS: European Inventory of Existing Commercial Chemical Substances  
 ELINCS: European List of Notified Chemical Substances  
 CAS: Chemical Abstracts Service (division of the American Chemical Society)  
 VOC: Volatile Organic Compounds (USA, EU)  
 LC50: Lethal concentration, 50 percent  
 LD50: Lethal dose, 50 percent  
 PBT: Persistent, Bioaccumulative and Toxic  
 SVHC: Substances of Very High Concern  
 vPvB: very Persistent and very Bioaccumulative  
 Acute Tox. 4: Acute toxicity – Category 4  
 Acute Tox. 1: Acute toxicity – Category 1  
 Acute Tox. 3: Acute toxicity – Category 3  
 Skin Irrit. 2: Skin corrosion/irritation – Category 2  
 Eye Irrit. 2: Serious eye damage/eye irritation – Category 2  
 Resp. Sens. 1: Respiratory sensitisation – Category 1  
 Skin Sens. 1: Skin sensitisation – Category 1  
 STOT SE 3: Specific target organ toxicity (single exposure) – Category 3