

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

### 1.1. Product identifier

Product name                      Hypalon 2 part Adhesive Activator (Part B)

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

Identified uses                      Curative Solution

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

Supplier                              Inflatex Ltd  
     Uxmore Barn, Uxmore Farm  
     Kit Lane  
     Checkendon  
     RG8 0TY  
     info@ribstore.co.uk

### 1.4. Emergency telephone number

Emergency telephone              +44 1491 340010

## SECTION 2: Hazards identification

### 2.1. Classification of the substance or mixture Classification

Physical hazards                      Flam. Liq. 2 - H225  
 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, H336 STOT RE 2 - H373  
 Environmental hazards              Not Classified

Classification (67/548/EEC or 1999/45/EC)    Xn;R20,R48/20. Carc. Cat. 3;R40. R42/43. Xi;R36/37/38. F;R11.

Human health                         May cause sensitisation by inhalation. Suspected of causing cancer. The product is irritating to eyes and skin. May cause damage to organs through prolonged or repeated exposure.

Environmental                        The product will harden into a solid mass in contact with water and moisture. The resultant material is not biodegradable.

Physicochemical                      Vapours are heavier than air and may travel along the floor and accumulate in the bottom of containers.

### 2.2. Label elements

Pictogram



Signal word

Danger

Hazard statements	<p>H335 May cause respiratory irritation.</p> <p>H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.</p> <p>H319 Causes serious eye irritation.</p> <p>H336 May cause drowsiness or dizziness.</p> <p>H332 Harmful if inhaled.</p> <p>H373 May cause damage to organs through prolonged or repeated exposure.</p> <p>H317 May cause an allergic skin reaction.</p> <p>H225 Highly flammable liquid and vapour.</p> <p>H315 Causes skin irritation.</p> <p>H351 Suspected of causing cancer.</p>
Precautionary statements	<p>P202 Do not handle until all safety precautions have been read and understood.</p> <p>P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.</p> <p>P243 Take precautionary measures against static discharge.</p> <p>P261 Avoid breathing vapour/spray.</p> <p>P280 Wear protective gloves/protective clothing/eye protection/face protection.</p> <p>P308+P313 IF exposed or concerned: Get medical advice/attention.</p>
Supplemental label information	<p>EUH204 Contains isocyanates. May produce an allergic reaction.</p>
Contains	<p>ETHYL ACETATE, Diphenylmethane - diisocyanate, isomers and homologues</p>
Supplementary precautionary statements	<p>P201 Obtain special instructions before use.</p> <p>P240 Ground/bond container and receiving equipment.</p> <p>P241 Use explosion-proof electrical equipment.</p> <p>P242 Use only non-sparking tools.</p> <p>P260 Do not breathe vapour/spray.</p> <p>P264 Wash contaminated skin thoroughly after handling.</p> <p>P271 Use only outdoors or in a well-ventilated area.</p> <p>P272 Contaminated work clothing should not be allowed out of the workplace.</p> <p>P284 [In case of inadequate ventilation] wear respiratory protection.</p> <p>P302+P352 IF ON SKIN: Wash with plenty of water.</p> <p>P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.</p> <p>P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.</p> <p>P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.</p> <p>P312 Call a POISON CENTER/doctor if you feel unwell.</p> <p>P314 Get medical advice/attention if you feel unwell.</p> <p>P321 Specific treatment (see medical advice on this label).</p> <p>P332+P313 If skin irritation occurs: Get medical advice/attention.</p> <p>P333+P313 If skin irritation or rash occurs: Get medical advice/attention.</p> <p>P337+P313 If eye irritation persists: Get medical advice/attention.</p> <p>P342+P311 If experiencing respiratory symptoms: Call a POISON CENTER/doctor.</p> <p>P362+P364 Take off contaminated clothing and wash it before reuse.</p> <p>P370+P378 In case of fire: Use foam, carbon dioxide, dry powder or water fog to extinguish.</p> <p>P403+P233 Store in a well-ventilated place. Keep container tightly closed.</p> <p>P403+P235 Store in a well-ventilated place. Keep cool.</p> <p>P405 Store locked up.</p> <p>P501 Dispose of contents/container in accordance with national regulations.</p>

### 2.3. Other hazards

This product does not contain any substances classified as PBT or vPvB.

### SECTION 3: Composition/information on ingredients

### 3.2. Mixtures

ETHYL ACETATE	60-100%	
CAS number: 141-78-6	EC number: 205-500-4	REACH registration number: 012119475103-46
Classification Flam. Liq. 2 - H225 Eye Irrit. 2 - H319 STOT SE 3 - H336	Classification (67/548/EEC or 1999/45/EC) F;R11 Xi;R36 R66 R67	
Diphenylmethane - diisocyanate, isomers and homologues	30-60%	
CAS number: 9016-87-9	Classification (67/548/EEC or 1999/45/EC) Xn;R20,R48/20. Carc. Cat. 3;R40. Xi;R36/37/38. R42/43.	
Classification 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		

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

Composition comments      The data shown are in accordance with the latest EC Directives.,The product contains organic solvents.

### SECTION 4: First aid measures

#### 4.1. Description of first aid measures

General information	Get medical attention if any discomfort continues.
Inhalation	Move affected person to fresh air at once. Get medical attention. Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. When breathing is difficult, properly trained personnel may assist affected person by administering oxygen.
Ingestion	Do not induce vomiting. Never give anything by mouth to an unconscious person. Do not induce vomiting. Remove affected person from source of contamination. Get medical attention immediately. Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing.
Skin contact	Remove affected person from source of contamination. Remove contaminated clothing. Wash skin thoroughly with soap and water. Get medical attention promptly if symptoms occur after washing.
Eye contact	Remove affected person from source of contamination. Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 15 minutes and get medical attention.
Protection of first aiders	First aid personnel should wear appropriate protective equipment during any rescue. It may be dangerous for first aid personnel to carry out mouth-to-mouth resuscitation.

#### 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. The product contains a sensitising substance. Persons already sensitised to diisocyanates may develop allergic reactions when using this product.
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Inhalation	Vapours may cause headache, fatigue, dizziness and nausea. The product contains a sensitising substance. The product contains organic solvents. Frequent inhalation of vapours may cause respiratory allergy.
Ingestion	May cause stomach pain or vomiting.
Skin contact	May cause skin irritation/eczema. May cause sensitisation or allergic reactions in sensitive individuals.
Eye contact	May cause severe eye irritation.

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

Notes for the doctor      The product irritates the respiratory tract and may trigger sensitisation of the skin or respiratory tract. Treatment of acute irritation or bronchial constriction is primarily symptomatic. Extended medical treatment may be required depending on the degree of exposure and the severity of the symptoms.

Specific treatments      Treat symptomatically.

### **SECTION 5: Firefighting measures**

#### 5.1. Extinguishing media

Suitable extinguishing media      Use fire-extinguishing media suitable for the surrounding fire.

Unsuitable extinguishing media      Water.

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

Specific hazards      Thermal decomposition or combustion products may include the following substances: Asphyxiating gases. Carbon monoxide (CO). Carbon dioxide (CO<sub>2</sub>). Hydrogen cyanide (HCN). Isocyanates.

Hazardous combustion products      Heating may generate the following products: Carbon monoxide (CO). Oxides of nitrogen. Isocyanates.

#### 5.3. Advice for firefighters

Protective actions during firefighting      Avoid breathing fire gases or vapours. Thermal decomposition or combustion products may include the following substances: Toxic and corrosive gases or vapours. Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing.

Special protective equipment protective for firefighters      Control run-off water by containing and keeping it out of sewers and watercourses. Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate clothing.

### **SECTION 6: Accidental release measures**

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

Personal precautions      Wear protective clothing as described in Section 8 of this safety data sheet. Avoid inhalation of dust and vapours. If ventilation is inadequate, suitable respiratory protection must be worn.

For non-emergency personnel      Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing.

For emergency responders      Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing.

#### 6.2. Environmental precautions

Environmental precautions      Do not discharge into drains or watercourses or onto the ground.

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

Methods for cleaning up      Wear suitable protective equipment, including gloves, goggles/face shield, respirator, boots, clothing or apron, as appropriate. Absorb in vermiculite, dry sand or earth and place into containers. Avoid the spillage or runoff entering drains, sewers or watercourses.

### 6.4. Reference to other sections

Reference to other sections      Wear protective clothing as described in Section 8 of this safety data sheet. See Section 11 for additional information on health hazards.

## **SECTION 7: Handling and storage**

### 7.1. Precautions for safe handling

Usage precautions      Avoid spilling. Provide adequate ventilation. Avoid inhalation of vapours. Use approved respirator if air contamination is above an acceptable level. Wear appropriate clothing to prevent skin contamination.

Advice on general occupational hygiene      Wash hands and any other contaminated areas of the body with soap and water before leaving the work site. When using do not eat, drink or smoke.

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

Storage precautions      Store in tightly-closed, original container in a dry, cool and well-ventilated place. Keep only in the original container.

Storage class      Water-reactive storage.

### 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

#### ETHYL ACETATE

Long-term exposure limit (8-hour TWA): WEL 200 ppm Short-term exposure limit (15-minute): WEL 400 ppm

Diphenylmethane - diisocyanate, isomers and homologues Long-term exposure limit (8-hour TWA): WEL 0.02 mg/m<sup>3</sup>

Short-term exposure limit (15-minute): WEL 0.07 mg/m<sup>3</sup>

WEL = Workplace Exposure Limit

#### ETHYL ACETATE (CAS: 141-78-6)

DNEL	Industry - Inhalation; Short term systemic effects: 1468 mg/m <sup>3</sup>
	Industry - Inhalation; Short term local effects: 1468 mg/m <sup>3</sup>
	Consumer - Inhalation; Short term systemic effects: 734 mg/m <sup>3</sup>
	Consumer - Inhalation; Short term local effects: 734 mg/m <sup>3</sup>
	Industry - Inhalation; Long term local effects: 734 mg/m <sup>3</sup>
	Industry - Dermal; Long term systemic effects: 63 mg/kg/day
	Industry - Inhalation; Long term systemic effects: 734 mg/m <sup>3</sup>
	Consumer - Dermal; Long term systemic effects: 37 mg/kg/day
	Consumer - Inhalation; Long term systemic effects: 367 mg/m <sup>3</sup>
PNEC	- Fresh water; 0.26 mg/l
	- Intermittent release; 1.65 mg/l
	- Sediment (Freshwater); 1.25 mg/kg
	- Sediment (Marinewater); 0.125 mg/kg
	- Soil; 0.24 mg/kg
- STP; 650 mg/l	

## 8.2. Exposure controls

### Protective equipment



Appropriate engineering controls

Provide adequate general and local exhaust ventilation. As this product contains ingredients with exposure limits, process enclosures, local exhaust ventilation or other engineering controls should be used to keep worker exposure below any statutory or recommended limits, if use generates dust, fumes, gas, vapour or mist.

Eye/face protection

The following protection should be worn: Chemical splash goggles. Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible. Personal protective equipment for eye and face protection should comply with European Standard EN166.

Hand protection

To protect hands from chemicals, gloves should comply with European Standard EN374. The most suitable glove should be chosen in consultation with the glove supplier/manufacture, who can provide information about the breakthrough time of the glove material. When used with mixtures, the protection time of gloves cannot be accurately estimated. The selected gloves should have a breakthrough time of at least 6 hours. Wear protective gloves made of the following material: Butyl rubber.

Other skin and body protection

Wear appropriate clothing to prevent any possibility of liquid contact and repeated or prolonged vapour contact.

Hygiene measures

Do not smoke in work area. Wash hands at the end of each work shift and before eating, smoking and using the toilet. Promptly remove any clothing that becomes contaminated. Wash promptly with soap and water if skin becomes contaminated. When using do not eat, drink or smoke.

Respiratory protection

Respiratory protection must be used if the airborne contamination exceeds the recommended occupational exposure limit. Wear a respirator fitted with the following cartridge: Gas filter, type A2. Respiratory protection complying with an approved standard should be worn if a risk assessment indicates inhalation of contaminants is possible. Ensure all respiratory protective equipment is suitable for its intended use and is 'CE'-marked.

Thermal hazards

Contact with hot product can cause serious thermal burns.

Environmental exposure controls

Keep container tightly sealed when not in use.

## SECTION 9: Physical and Chemical Properties

### 9.1. Information on basic physical and chemical properties

Appearance	Liquid.
Colour	Brown.
Initial boiling point and range	77°C @ 760 mm Hg
Flash point	-3°C CC (Closed cup).
Upper/lower flammability or explosive limits	Lower flammable/explosive limit: 2.1 Upper flammable/explosive limit: 11.5
Relative density	0.97 @ @ 25°C
Solubility(ies)	9.0 - 10.0, ISO 976

Viscosity less than 50 cP @ 20°C

9.2. Other information

Volatility Volatile.

**SECTION 10: Stability and reactivity**

10.1. Reactivity

Reactivity Reactions with the following materials may generate heat: Water. The product will harden into a solid mass in contact with water and moisture.

10.2. Chemical stability

Stability Stable at normal ambient temperatures.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions The following materials may react strongly with the product: Alcohols. Amines. Water, moisture. The product will harden into a solid mass in contact with water and moisture.

10.4. Conditions to avoid

Conditions to avoid Reactions with the following materials may generate heat: Alkalis. Amines. When exposed to air, this product will absorb moisture. The product will harden into a solid mass in contact with water and moisture.

10.5. Incompatible materials

Materials to avoid Water-reactive materials.

10.6. Hazardous decomposition products

Hazardous decomposition products Heating may generate the following products: Carbon monoxide (CO). Oxides of nitrogen. Isocyanates.

**SECTION 11: Toxicological information**

Acute toxicity oral (LD<sub>50</sub> mg/kg) 5,620.0

Species Rat

ATE oral (mg/kg) 5,620.0

Acute toxicity - dermal

Acute toxicity dermal (LD<sub>50</sub> mg/kg) 19,000.0

Species Rabbit

ATE dermal (mg/kg) 19,000.0

Acute toxicity - inhalation

ATE inhalation (dusts/mists mg/l) 5.0

Carcinogenicity

Carcinogenicity Suspected of causing cancer.

General information

May cause respiratory allergy. May cause respiratory system irritation. Contains isocyanates. May produce an allergic reaction.

Inhalation

Harmful by inhalation. Irritating to respiratory system. May cause sensitisation by inhalation. Harmful: danger of serious damage to health by prolonged exposure through inhalation. May cause allergy or asthma symptoms or breathing difficulties if inhaled. Vapours may cause drowsiness and dizziness. May cause damage to organs through prolonged or repeated exposure if inhaled.

11.1. Information on toxicological effects Acute toxicity - oral

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Ingestion	Harmful if swallowed.
Skin contact	Irritating to skin. May cause sensitisation by skin contact. May cause an allergic skin reaction.
Eye contact	Particles in the eyes may cause irritation and smarting. Irritating to eyes. Causes serious eye irritation.

Acute and chronic health hazards Causes damage to organs through prolonged or repeated exposure. Suspected of causing cancer.

Route of entry Inhalation Skin and/or eye contact Target organs

Skin Eyes Respiratory system, lungs

Toxicological information on ingredients.

ETHYL ACETATE

Acute toxicity - oral

Acute toxicity oral (LD<sub>50</sub> mg/kg) 4,100.0

Species Mouse

ATE oral (mg/kg) 4,100.0

Acute toxicity - dermal

Acute toxicity dermal (LD<sub>50</sub> mg/kg) 2,005.0

Species Rabbit

ATE dermal (mg/kg) 2,005.0

Acute toxicity - inhalation

Acute toxicity inhalation (LC<sub>50</sub> vapours mg/l) 30.0

Species Rat

ATE inhalation (vapours mg/l) 30.0

Skin sensitisation

Skin sensitisation Guinea pig maximization test (GPMT) - Guinea pig: Negative

Reproductive toxicity

Reproductive toxicity - fertility - NOAEL 16000 ppm, Inhalation, Rat P

Reproductive toxicity development - NOAEL: 20000 ppm, Inhalation, Rat

Specific target organ toxicity - repeated exposure

STOT - repeated exposure Conclusive data but not sufficient for classification.

Diphenylmethane - diisocyanate isomers and homologues

Acute toxicity - oral

Acute toxicity oral (LD<sub>50</sub> mg/kg) 10,000.0

Species	Rat
<u>Acute toxicity - dermal</u>	
Acute toxicity dermal (LD <sub>50</sub> mg/kg)	9,400.0
Species	Rabbit
ATE dermal (mg/kg)	9,400.0
<u>Acute toxicity - inhalation</u>	
Acute toxicity inhalation (LC <sub>50</sub> dust/mist mg/l)	0.31
Species	Rat
ATE inhalation (dusts/mists mg/l)	1.5

## SECTION 12: Ecological Information

Ecotoxicity Not regarded as dangerous for the environment.

### 12.1. Toxicity

#### Ecological information on ingredients.

#### ETHYL ACETATE

Acute toxicity - fish	LC <sub>50</sub> , 96 hours, 96 hours: 230 mg/l, Pimephales promelas (Fat-head Minnow) NOEC, 192 hours: >9.65 mg/l, Pimephales promelas (Fat-head Minnow)
Acute toxicity - aquatic invertebrates	EC <sub>50</sub> , 48 hours, 48 hours: 610 mg/l, Daphnia magna NOEC, 192 hours, 192 hours: 2.4 mg/l, Daphnia magna
Acute toxicity - aquatic plants	EC <sub>50</sub> , 48 hours, 48 hours: 5,600 mg/l, Freshwater algae <u>Diphenylmethane - diisocyanate, isomers and homologues</u>
Acute toxicity - fish	LC <sub>50</sub> , 96 hours, 96 hours: > 1,000 mg/l, Brachydanio rerio (Zebra Fish)
Acute toxicity - aquatic invertebrates	EC <sub>50</sub> , 48 hours, 48 hours: > 1,000 mg/l, Daphnia magna NOEC, 192 hours, 192 hours: > 10 mg/l, Daphnia magna
Acute toxicity - aquatic plants	EC <sub>0</sub> , 72 hours, 72 hours: 1,640 mg/l, Scenedesmus subspicatus
Acute toxicity microorganisms	EC <sub>50</sub> , 3 hours, 3 hours: > 100 mg/l, Activated sludge
Acute toxicity - terrestrial	LC <sub>50</sub> , 14 days, 14 days: > 1,000 mg/kg, Eisenia Fetida (Earthworm)

### 12.2. Persistence and degradability

Persistence and degradability The product is not readily biodegradable.

#### Ecological information on ingredients.

#### ETHYL ACETATE

Persistence and degradability	The product is readily biodegradable.
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Biodegradation - Degradation (%) 79: 20 days  
readily biodegradable

Diphenylmethane - diisocyanate, isomers and homologues

Persistence and degradability The product is not readily biodegradable.

Biodegradation 9.0 - 10.0, ISO 976 - Degradation (%) 0: < 28 days  
No degradation observed

12.3. Bioaccumulative potential

Bioaccumulative potential No data available on bioaccumulation.

Ecological information on ingredients.

ETHYL ACETATE

Bioaccumulative potential The product does not contain any substances expected to be bioaccumulating.  
BCF: 30, Leuciscus idus (Golden orfe) readily biodegradable

Partition coefficient log Pow: 0.73

Diphenylmethane - diisocyanate, isomers and homologues

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

12.4. Mobility in soil

Mobility The product contains volatile organic compounds (VOCs) which will evaporate easily from all surfaces. Reactions with the following materials may generate heat: Water. The product hardens to a solid, immobile substance.

Ecological information on ingredients.

ETHYL ACETATE

Mobility The product contains volatile organic compounds (VOCs) which will evaporate easily from all surfaces.

Adsorption/desorption Soil - Koc: 1.43 @ 25°C coefficient

12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB This product does not contain any substances classified as PBT or vPvB. assessment

Ecological information on ingredients.

ETHYL ACETATE

Results of PBT and vPvB assessment This product does not contain any substances classified as PBT or vPvB.

12.6. Other adverse effects

**SECTION 13: Disposal considerations**

13.1. Waste treatment methods

General information Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority.

Disposal methods Dispose of waste product or used containers in accordance with local regulations

**SECTION 14: Transport information**

#### 14.1. UN number

UN No. (ADR/RID)	1173
UN No. (IMDG)	1173
UN No. (ICAO)	1173
UN No. (ADN)	1173

#### 14.2. UN proper shipping name

Proper shipping name (ADR/RID) ETHYL ACETATE

Proper shipping name (IMDG) ETHYL ACETATE (IMDG)

Proper shipping name (ICAO) ETHYL ACETATE

Proper shipping name (ADN) ETHYL ACETATE

#### 14.3. Transport hazard class(es)

ADR/RID class 3

ADR/RID classification code F1

ADR/RID label 3

IMDG class 3

ICAO class/division 3

ADN class 3

Transport labels



#### 14.4. Packing group

ADR/RID packing group II

IMDG packing group II

ADN packing group II

ICAO packing group II

#### 14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant  
No.

#### 14.6. Special precautions for user

EmS F-E, S-D

ADR transport category 2

Emergency Action Code •3YE

Hazard Identification Number (ADR/RID) 33

Tunnel restriction code (D/E)

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

Transport in bulk according to            Not applicable. Annex II of MARPOL 73/78 and the IBC Code

### SECTION 15: Regulatory information

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

National regulations	The Control of Substances Hazardous to Health Regulations 2002 (SI 2002 No. 2677) (as amended). The Chemicals (Hazard Information and Packaging for Supply) Regulations 2009 (SI 2009 No. 716). EH40/2005 Workplace exposure limits.
EU legislation	Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures (as amended). Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (as amended).
Guidance	Isocyanates: Health hazards and precautionary measures EH16. Workplace Exposure Limits EH40. Isocyanates: Health hazards and precautionary measures EH16.
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.

#### 15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

### SECTION 16: Other information

Abbreviations and acronyms used in the safety data sheet	<p>ATE: Acute Toxicity Estimate.</p> <p>ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.</p> <p>CAS: Chemical Abstracts Service.</p> <p>DNEL: Derived No Effect Level.</p> <p>GHS: Globally Harmonized System.</p> <p>IATA: International Air Transport Association.</p> <p>ICAO-TI: Technical Instructions for the Safe Transport of Dangerous Goods by Air.</p> <p>IMDG: International Maritime Dangerous Goods.</p> <p>Kow: Octanol-water partition coefficient.</p> <p>LC<sub>50</sub>: Lethal Concentration to 50 % of a test population.</p> <p>LD<sub>50</sub>: Lethal Dose to 50% of a test population (Median Lethal Dose).</p> <p>PBT: Persistent, Bioaccumulative and Toxic substance.</p> <p>PNEC: Predicted No Effect Concentration.</p> <p>REACH: Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006.</p> <p>RID: European Agreement concerning the International Carriage of Dangerous Goods by Rail.</p> <p>vPvB: Very Persistent and Very Bioaccumulative.</p> <p>IARC: International Agency for Research on Cancer.</p> <p>MARPOL 73/78: International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978.</p> <p>cATpE: Converted Acute Toxicity Point Estimate.</p> <p>BCF: Bioconcentration Factor.</p> <p>BOD: Biochemical Oxygen Demand.</p> <p>EC<sub>50</sub>: 50% of maximal Effective Concentration.</p> <p>LOAEC: Lowest Observed Adverse Effect Concentration.</p> <p>LOAEL: Lowest Observed Adverse Effect Level.</p> <p>NOAEC: No Observed Adverse Effect Concentration.</p> <p>NOAEL: No Observed Adverse Effect Level.</p> <p>NOEC: No Observed Effect Concentration.</p> <p>LOEC: Lowest Observed Effect Concentration.</p> <p>UN: United Nations.</p>
Key literature references and sources for data	Dangerous Properties of Industrial Materials Report, N.Sax et.al.
Revision comments	NOTE: Lines within the margin indicate significant changes from the previous revision.
Revision date	06/06/2016
Revision	12
Risk phrases in full	<p>R11 Highly flammable.</p> <p>R20 Harmful by inhalation.</p> <p>R36 Irritating to eyes.</p> <p>R36/37/38 Irritating to eyes, respiratory system and skin.</p> <p>R40 Limited evidence of a carcinogenic effect.</p> <p>R42/43 May cause sensitisation by inhalation and skin contact.</p> <p>R48/20 Harmful: danger of serious damage to health by prolonged exposure through inhalation.</p> <p>R66 Repeated exposure may cause skin dryness or cracking.</p> <p>R67 Vapours may cause drowsiness and dizziness.</p>

Hazard statements in full

- H225 Highly flammable liquid and vapour.
- 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.
- H336 May cause drowsiness or dizziness.
- 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.