

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

#### 1.1. Product identifier

Product form : Mixture  
 Trade name : PC15 Water Clear PU Casting Resin Part A  
 Product code : PC15

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

##### 1.2.1. Relevant identified uses

Main use category : Industrial use, Professional use  
 Use of the substance/mixture : Casting compound

##### 1.2.2. Uses advised against

No additional information available

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

Easy Composites Ltd  
 Unit 39, Park Hall Business Village, Stoke on Trent,  
 Staffordshire,  
 ST3 5XA.  
 United Kingdom.

Tel: +44 (0)1782 454499 -  
 sales@easycomposites.com

#### 1.4. Emergency telephone number

Emergency number : +44 (0)1782 454499 (working hours only)

### SECTION 2: Hazards identification

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

##### Classification according to Regulation (EC) No. 1272/2008 [CLP]

Acute toxicity (oral), Category 4	H302
Skin sensitisation, Category 1	H317
Hazardous to the aquatic environment – Acute Hazard, Category 1	H400
Hazardous to the aquatic environment – Chronic Hazard, Category 1	H410

Full text of H- and EUH-statements: see section 16

##### Adverse physicochemical, human health and environmental effects

Harmful if swallowed. May cause an allergic skin reaction. Very toxic to aquatic life with long lasting effects.

#### 2.2. Label elements

##### Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP) :



GHS07

GHS09

Signal word (CLP) : Warning  
 Contains : Pentaerythritol tetrakis(3-mercaptopropionate), 3-Mercaptopropionic acid  
 Hazard statements (CLP) : H302 - Harmful if swallowed.  
 H317 - May cause an allergic skin reaction.  
 H410 - Very toxic to aquatic life with long lasting effects.  
 Precautionary statements (CLP) : P261 - Avoid breathing dust/fume/gas/mist/vapours/spray.  
 P264 - Wash hands thoroughly after handling.

P280 - Wear eye protection, protective clothing, protective gloves.  
P321 - Specific treatment (see supplemental first aid instruction on this label).  
P333+P313 - If skin irritation or rash occurs: Get medical advice/attention.  
P391 - Collect spillage.

### 2.3. Other hazards

Contains no PBT/vPvB substances  $\geq 0.1\%$  assessed in accordance with REACH Annex XIII

## SECTION 3: Composition/information on ingredients

### 3.1. Substances

Not applicable

### 3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Pentaerythritol tetrakis(3-mercaptopropionate)	CAS-No.: 7575-23-7 EC-No.: 231-472-8 REACH-no: 01-2119486981-23	$\geq 50$	Acute Tox. 4 (Oral), H302 Skin Sens. 1, H317 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
3-Mercaptopropionic acid	CAS-No.: 107-96-0 EC-No.: 203-537-0 REACH-no: 01-2119489443-30	0.05 – 1	Met. Corr. 1, H290 Acute Tox. 3 (Oral), H301 Acute Tox. 4 (Inhalation), H332 Skin Corr. 1, H314 Eye Dam. 1, H318
2,6-dimethylheptan-4-one; di-isobutyl ketone substance with national workplace exposure limit(s) (GB)	CAS-No.: 108-83-8 EC-No.: 203-620-1 EC Index-No.: 606-005-00-X	< 1	Flam. Liq. 3, H226 STOT SE 3, H335
2-methylpropan-1-ol; iso-butanol substance with national workplace exposure limit(s) (GB)	CAS-No.: 78-83-1 EC-No.: 201-148-0 EC Index-No.: 603-108-00-1 REACH-no: 01-2119484609-23	< 0.05	Flam. Liq. 3, H226 Skin Irrit. 2, H315 Eye Dam. 1, H318 STOT SE 3, H336 STOT SE 3, H335

### Specific concentration limits:

Name	Product identifier	Specific concentration limits
2,6-dimethylheptan-4-one; di-isobutyl ketone	CAS-No.: 108-83-8 EC-No.: 203-620-1 EC Index-No.: 606-005-00-X	( 10 $\leq$ C $\leq$ 100) STOT SE 3, H335

Full text of H- and EUH-statements: see section 16

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

First-aid measures general	: Call a poison center or a doctor if you feel unwell.
First-aid measures after inhalation	: Remove person to fresh air and keep comfortable for breathing.
First-aid measures after skin contact	: Wash skin with plenty of water. Take off contaminated clothing. If skin irritation or rash occurs: Get medical advice/attention.
First-aid measures after eye contact	: Rinse eyes with water as a precaution.
First-aid measures after ingestion	: Rinse mouth. Call a poison center or a doctor if you feel unwell.

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

Symptoms/effects after skin contact : May cause an allergic skin reaction.

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

Treat symptomatically.

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

Suitable extinguishing media : Water spray. Dry powder. Foam. Carbon dioxide.

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

Hazardous decomposition products in case of fire : Toxic fumes may be released.

### 5.3. Advice for firefighters

Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

## SECTION 6: Accidental release measures

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

#### 6.1.1. For non-emergency personnel

Emergency procedures : Ventilate spillage area. Avoid contact with skin and eyes. Avoid breathing dust/fume/gas/mist/vapours/spray.

#### 6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

### 6.2. Environmental precautions

Avoid release to the environment.

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

For containment : Collect spillage.  
Methods for cleaning up : Take up liquid spill into absorbent material.  
Other information : Dispose of materials or solid residues at an authorized site.

### 6.4. Reference to other sections

For further information refer to section 13.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

Precautions for safe handling : Ensure good ventilation of the work station. Avoid contact with skin and eyes. Avoid breathing dust/fume/gas/mist/vapours/spray. Wear personal protective equipment.  
Hygiene measures : Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

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

Storage conditions : Store in a well-ventilated place. Keep cool.

### 7.3. Specific end use(s)

No additional information available

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

#### 8.1.1 National occupational exposure and biological limit values

2-methylpropan-1-ol; iso-butanol (78-83-1)	
<b>United Kingdom - Occupational Exposure Limits</b>	
WEL TWA (OEL TWA) [1]	154 mg/m <sup>3</sup>
WEL TWA (OEL TWA) [2]	50 ppm
WEL STEL (OEL STEL)	231 mg/m <sup>3</sup>
WEL STEL (OEL STEL) [ppm]	75 ppm
2,6-dimethylheptan-4-one; di-isobutyl ketone (108-83-8)	
<b>United Kingdom - Occupational Exposure Limits</b>	
WEL TWA (OEL TWA) [1]	148 mg/m <sup>3</sup>
WEL TWA (OEL TWA) [2]	25 ppm

#### 8.1.2. Recommended monitoring procedures

No additional information available

#### 8.1.3. Air contaminants formed

No additional information available

#### 8.1.4. DNEL and PNEC

No additional information available

#### 8.1.5. Control banding

No additional information available

### 8.2. Exposure controls

#### 8.2.1. Appropriate engineering controls

##### Appropriate engineering controls:

Ensure good ventilation of the work station.

#### 8.2.2. Personal protection equipment

##### Personal protective equipment symbol(s):



##### 8.2.2.1. Eye and face protection

###### Eye protection:

Safety glasses

##### 8.2.2.2. Skin protection

###### Skin and body protection:

Wear suitable protective clothing

###### Hand protection:

Protective gloves

### 8.2.2.3. Respiratory protection

#### Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment

### 8.2.2.4. Thermal hazards

No additional information available

### 8.2.3. Environmental exposure controls

#### Environmental exposure controls:

Avoid release to the environment.

## SECTION 9: Physical and chemical properties

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

Physical state	: Liquid
Colour	: Colourless.
Odour	: characteristic.
Odour threshold	: No data available
pH	: No data available
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: Not applicable
Freezing point	: No data available
Boiling point	: No data available
Flash point	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: Not applicable
Vapour pressure	: No data available
Relative vapour density at 20°C	: No data available
Relative density	: No data available
Density	: 1.25 – 1.3 g/cm <sup>3</sup> (25°C)
Solubility	: No data available
Partition coefficient n-octanol/water (Log Pow)	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: 300 – 500 mPa.s (25°C)
Explosive properties	: No data available
Oxidising properties	: No data available
Explosive limits	: No data available

### 9.2. Other information

No additional information available

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

### 10.2. Chemical stability

Stable under normal conditions.

### 10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

### 10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

### 10.5. Incompatible materials

No additional information available

### 10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

Acute toxicity (oral) : Harmful if swallowed.  
Acute toxicity (dermal) : Not classified  
Acute toxicity (inhalation) : Not classified

#### Crystal Cast 1000A

ATE CLP (oral)	1004.094 mg/kg bodyweight
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#### Pentaerythritol tetrakis(3-mercaptopropionate) (7575-23-7)

LD50 oral rat	1000 – 2000 mg/kg bodyweight Animal: rat, Animal sex: female, Guideline: OECD Guideline 423 (Acute Oral toxicity - Acute Toxic Class Method), Remarks on results: other:
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#### 3-Mercaptopropionic acid (107-96-0)

LD50 oral rat	63 – 126 mg/kg bodyweight Animal: rat, Animal sex: female, Guideline: OECD Guideline 401 (Acute Oral Toxicity)
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#### 2-methylpropan-1-ol; iso-butanol (78-83-1)

LD50 oral rat	> 2830 mg/kg
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LD50 dermal rabbit	> 2000 mg/kg
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#### 2,6-dimethylheptan-4-one; di-isobutyl ketone (108-83-8)

LD50 oral rat	3200 mg/kg Source: ECHA
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LD50 dermal rat	4556 mg/kg Source: ECHA
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LC50 Inhalation - Rat	> 14.5 mg/l air Animal: rat, Guideline: OECD Guideline 403 (Acute Inhalation Toxicity), Remarks on results: other:
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LC50 Inhalation - Rat (Vapours)	11.5 mg/l Source: ECHA
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Skin corrosion/irritation : Not classified  
Serious eye damage/irritation : Not classified  
Respiratory or skin sensitisation : May cause an allergic skin reaction.  
Germ cell mutagenicity : Not classified  
Carcinogenicity : Not classified  
Reproductive toxicity : Not classified  
STOT-single exposure : Not classified

#### 2-methylpropan-1-ol; iso-butanol (78-83-1)

STOT-single exposure	May cause drowsiness or dizziness. May cause respiratory irritation.
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#### 2,6-dimethylheptan-4-one; di-isobutyl ketone (108-83-8)

STOT-single exposure	May cause respiratory irritation.
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STOT-repeated exposure : Not classified

#### 2-methylpropan-1-ol; iso-butanol (78-83-1)

NOAEL (oral, rat, 90 days)	> 1450 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity Study in Rodents)
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### 2,6-dimethylheptan-4-one; di-isobutyl ketone (108-83-8)

LOAEL (oral, rat, 90 days)	1000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity Study in Rodents)
NOAEC (inhalation, rat, vapour, 90 days)	3698 mg/l air Animal: rat, Guideline: OECD Guideline 412 (Subacute Inhalation Toxicity: 28-Day Study)

Aspiration hazard : Not classified

### 3-Mercaptopropionic acid (107-96-0)

Viscosity, kinematic	≈ 7875 mm <sup>2</sup> /s Temp.: '20°C' Parameter: 'kinematic viscosity (in mm <sup>2</sup> /s)'
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### 2-methylpropan-1-ol; iso-butanol (78-83-1)

Viscosity, kinematic	4.989 mm <sup>2</sup> /s
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### 2,6-dimethylheptan-4-one; di-isobutyl ketone (108-83-8)

Viscosity, kinematic	1.073 mm <sup>2</sup> /s
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## SECTION 12: Ecological information

### 12.1. Toxicity

Ecology - general : Very toxic to aquatic life with long lasting effects.  
 Hazardous to the aquatic environment, short-term (acute) : Very toxic to aquatic life.  
 Hazardous to the aquatic environment, long-term (chronic) : Very toxic to aquatic life with long lasting effects.  
 Not rapidly degradable

### Pentaerythritol tetrakis(3-mercaptopropionate) (7575-23-7)

LC50 - Fish [1]	0.42 mg/l Oncorhynchus mykiss (Rainbow trout)
EC50 - Crustacea [1]	0.71 mg/l Daphnia magna (Water flea)

### 2-methylpropan-1-ol; iso-butanol (78-83-1)

LC50 - Fish [1]	1430 mg/l Source: ECHA
EC50 - Crustacea [1]	1100 mg/l Source: ECHA
EC50 72h - Algae [1]	593 mg/l Source: ECHA
ErC50 algae	1799 mg/l Pseudokirchneriella subcapitata
NOEC (chronic)	20 mg/l Test organisms (species): Daphnia magna Duration: '21 d'

### 2,6-dimethylheptan-4-one; di-isobutyl ketone (108-83-8)

LC50 - Fish [1]	30 mg/l Source: ECHA
EC50 - Crustacea [1]	37.2 mg/l Test organisms (species): Daphnia magna
ErC50 algae	46.9 mg/l Source: ECHA

### 12.2. Persistence and degradability

No additional information available

### 12.3. Bioaccumulative potential

### Pentaerythritol tetrakis(3-mercaptopropionate) (7575-23-7)

Partition coefficient n-octanol/water (Log Pow)	3.03
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### 3-Mercaptopropionic acid (107-96-0)

Partition coefficient n-octanol/water (Log Pow)	0.43
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### 2-methylpropan-1-ol; iso-butanol (78-83-1)

Partition coefficient n-octanol/water (Log Pow)	1
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### 2,6-dimethylheptan-4-one; di-isobutyl ketone (108-83-8)

Partition coefficient n-octanol/water (Log Pow)	2.56 Source: 3
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## 12.4. Mobility in soil

### Pentaerythritol tetrakis(3-mercaptopropionate) (7575-23-7)

Mobility in soil	225300 Source: Quantitative Structure Activity Relation
Surface tension	50.6 mN/m

## 12.5. Results of PBT and vPvB assessment

No additional information available

## 12.6. Other adverse effects

No additional information available

# SECTION 13: Disposal considerations

## 13.1. Waste treatment methods

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.  
 HP Code : HP3 - "Flammable:"  
 - flammable liquid waste: liquid waste having a flash point below 60 °C or waste gas oil, diesel and light heating oils having a flash point > 55 °C and ≤ 75 °C;  
 - flammable pyrophoric liquid and solid waste: solid or liquid waste which, even in small quantities, is liable to ignite within five minutes after coming into contact with air;  
 - flammable solid waste: solid waste which is readily combustible or may cause or contribute to fire through friction;  
 - flammable gaseous waste: gaseous waste which is flammable in air at 20 °C and a standard pressure of 101.3 kPa;  
 - water reactive waste: waste which, in contact with water, emits flammable gases in dangerous quantities;  
 - other flammable waste: flammable aerosols, flammable self-heating waste, flammable organic peroxides and flammable self-reactive waste.  
 HP6 - "Acute Toxicity:" waste which can cause acute toxic effects following oral or dermal administration, or inhalation exposure.  
 HP13 - "Sensitising:" waste which contains one or more substances known to cause sensitising effects to the skin or the respiratory organs.  
 HP14 - "Ecotoxic:" waste which presents or may present immediate or delayed risks for one or more sectors of the environment

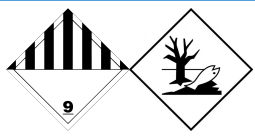


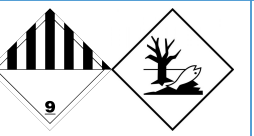

# SECTION 14: Transport information

In accordance with ADR / IMDG / IATA / ADN / RID

ADR	IMDG	IATA	ADN	RID
Special provision(s) applied : 375	Special provision(s) applied : 969	Special provision(s) applied : A197	Special provision(s) applied : 375	Special provision(s) applied : 375

These substances when carried in single or combination packagings containing a net quantity per single or inner packaging of 5 l or less for liquids or having a net mass per single or inner packaging of 5 kg or less for solids, are not subject to any other provisions of ADR provided the packagings meet the general provisions of 4.1.1.1, 4.1.1.2 and 4.1.1.4 to 4.1.1.8.



ADR	IMDG	IATA	ADN	RID
<b>14.1. UN number</b>				
UN 3082	UN 3082	UN 3082	UN 3082	UN 3082
<b>14.2. UN proper shipping name</b>				
ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (CONTAINS : Pentaerythritol tetrakis(3-mercaptopropionate))	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (CONTAINS : Pentaerythritol tetrakis(3-mercaptopropionate))	Environmentally hazardous substance, liquid, n.o.s. (CONTAINS : Pentaerythritol tetrakis(3-mercaptopropionate))	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (CONTAINS : Pentaerythritol tetrakis(3-mercaptopropionate))	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (CONTAINS : Pentaerythritol tetrakis(3-mercaptopropionate))
<b>Transport document description</b>				
UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (CONTAINS : Pentaerythritol tetrakis(3-mercaptopropionate)), 9, III, (-)	UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (CONTAINS : Pentaerythritol tetrakis(3-mercaptopropionate)), 9, III, MARINE POLLUTANT	UN 3082 Environmentally hazardous substance, liquid, n.o.s. (CONTAINS : Pentaerythritol tetrakis(3-mercaptopropionate)), 9, III	UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (CONTAINS : Pentaerythritol tetrakis(3-mercaptopropionate)), 9, III	UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (CONTAINS : Pentaerythritol tetrakis(3-mercaptopropionate)), 9, III
<b>14.3. Transport hazard class(es)</b>				
9	9	9	9	9
				
<b>14.4. Packing group</b>				
III	III	III	III	III
<b>14.5. Environmental hazards</b>				
Dangerous for the environment: Yes	Dangerous for the environment: Yes Marine pollutant: Yes	Dangerous for the environment: Yes	Dangerous for the environment: Yes	Dangerous for the environment: Yes
No supplementary information available				

### 14.6. Special precautions for user

#### Overland transport

Classification code (ADR)	: M6
Special provisions (ADR)	: 274, 335, 375, 601
Limited quantities (ADR)	: 5I
Excepted quantities (ADR)	: E1
Packing instructions (ADR)	: P001, IBC03, LP01, R001
Special packing provisions (ADR)	: PP1
Mixed packing provisions (ADR)	: MP19
Portable tank and bulk container instructions (ADR)	: T4
Portable tank and bulk container special provisions (ADR)	: TP1, TP29
Tank code (ADR)	: LGBV
Vehicle for tank carriage	: AT
Transport category (ADR)	: 3
Special provisions for carriage - Packages (ADR)	: V12
Special provisions for carriage - Loading, unloading and handling (ADR)	: CV13
Hazard identification number (Kemler No.)	: 90

Orange plates : 

Tunnel restriction code (ADR) : -  
EAC code : •3Z

### Transport by sea

Special provisions (IMDG) : 274, 335, 969  
Limited quantities (IMDG) : 5 L  
Excepted quantities (IMDG) : E1  
Packing instructions (IMDG) : LP01, P001  
Special packing provisions (IMDG) : PP1  
IBC packing instructions (IMDG) : IBC03  
Tank instructions (IMDG) : T4  
Tank special provisions (IMDG) : TP1, TP29  
EmS-No. (Fire) : F-A  
EmS-No. (Spillage) : S-F  
Stowage category (IMDG) : A

### Air transport

PCA Excepted quantities (IATA) : E1  
PCA Limited quantities (IATA) : Y964  
PCA limited quantity max net quantity (IATA) : 30kgG  
PCA packing instructions (IATA) : 964  
PCA max net quantity (IATA) : 450L  
CAO packing instructions (IATA) : 964  
CAO max net quantity (IATA) : 450L  
Special provisions (IATA) : A97, A158, A197, A215  
ERG code (IATA) : 9L

### Inland waterway transport

Classification code (ADN) : M6  
Special provisions (ADN) : 274, 335, 375, 601  
Limited quantities (ADN) : 5 L  
Excepted quantities (ADN) : E1  
Carriage permitted (ADN) : T  
Equipment required (ADN) : PP  
Number of blue cones/lights (ADN) : 0

### Rail transport

Classification code (RID) : M6  
Special provisions (RID) : 274, 335, 375, 601  
Limited quantities (RID) : 5L  
Excepted quantities (RID) : E1  
Packing instructions (RID) : P001, IBC03, LP01, R001  
Special packing provisions (RID) : PP1  
Mixed packing provisions (RID) : MP19  
Portable tank and bulk container instructions (RID) : T4  
Portable tank and bulk container special provisions (RID) : TP1, TP29  
Tank codes for RID tanks (RID) : LGBV  
Transport category (RID) : 3  
Special provisions for carriage – Packages (RID) : W12  
Special provisions for carriage - Loading, unloading and handling (RID) : CW13, CW31  
Colis express (express parcels) (RID) : CE8  
Hazard identification number (RID) : 90

### 14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

Not applicable

### SECTION 15: Regulatory information

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

##### 15.1.1. EU-Regulations

###### REACH Annex XVII (Restriction List)

Contains no substance(s) listed on REACH Annex XVII (Restriction Conditions)

###### REACH Annex XIV (Authorisation List)

Contains no substance(s) listed on REACH Annex XIV (Authorisation List)

###### REACH Candidate List (SVHC)

Contains no substance(s) listed on the REACH Candidate List

###### PIC Regulation (Prior Informed Consent)

Contains no substance(s) listed on the PIC list (Regulation EU 649/2012 concerning the export and import of hazardous chemicals)

###### POP Regulation (Persistent Organic Pollutants)

Contains no substance(s) listed on the POP list (Regulation EU 2019/1021 on persistent organic pollutants)

###### Ozone Regulation (1005/2009)

Contains no substance(s) listed on the Ozone Depletion list (Regulation EU 1005/2009 on substances that deplete the ozone layer)

###### Explosives Precursors Regulation (2019/1148)

Contains no substance(s) listed on the Explosives Precursors list (Regulation EU 2019/1148 on the marketing and use of explosives precursors)

###### Drug Precursors Regulation (273/2004)

Contains no substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances)

##### 15.1.2. National regulations

No additional information available

#### 15.2. Chemical safety assessment

No chemical safety assessment has been carried out

### SECTION 16: Other information

#### Abbreviations and acronyms:

ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE	Acute Toxicity Estimate
BCF	Bioconcentration factor
BLV	Biological limit value
BOD	Biochemical oxygen demand (BOD)
COD	Chemical oxygen demand (COD)
DMEL	Derived Minimal Effect level
DNEL	Derived-No Effect Level
EC-No.	European Community number
EC50	Median effective concentration
EN	European Standard
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association

### Abbreviations and acronyms:

IMDG	International Maritime Dangerous Goods
LC50	Median lethal concentration
LD50	Median lethal dose
LOAEL	Lowest Observed Adverse Effect Level
NOAEC	No-Observed Adverse Effect Concentration
NOAEL	No-Observed Adverse Effect Level
NOEC	No-Observed Effect Concentration
OECD	Organisation for Economic Co-operation and Development
OEL	Occupational Exposure Limit
PBT	Persistent Bioaccumulative Toxic
PNEC	Predicted No-Effect Concentration
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
SDS	Safety Data Sheet
STP	Sewage treatment plant
ThOD	Theoretical oxygen demand (ThOD)
TLM	Median Tolerance Limit
VOC	Volatile Organic Compounds
CAS-No.	Chemical Abstract Service number
N.O.S.	Not Otherwise Specified
vPvB	Very Persistent and Very Bioaccumulative
ED	Endocrine disrupting properties

### Full text of H- and EUH-statements:

Acute Tox. 3 (Oral)	Acute toxicity (oral), Category 3
Acute Tox. 4 (Inhalation)	Acute toxicity (inhal.), Category 4
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Aquatic Acute 1	Hazardous to the aquatic environment – Acute Hazard, Category 1
Aquatic Chronic 1	Hazardous to the aquatic environment – Chronic Hazard, Category 1
Eye Dam. 1	Serious eye damage/eye irritation, Category 1
Flam. Liq. 3	Flammable liquids, Category 3
H226	Flammable liquid and vapour.
H290	May be corrosive to metals.
H301	Toxic if swallowed.
H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H332	Harmful if inhaled.

### Full text of H- and EUH-statements:

H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
Met. Corr. 1	Corrosive to metals, Category 1
Skin Corr. 1	Skin corrosion/irritation, Category 1
Skin Irrit. 2	Skin corrosion/irritation, Category 2
Skin Sens. 1	Skin sensitisation, Category 1
STOT SE 3	Specific target organ toxicity – Single exposure, Category 3, Narcosis

Safety Data Sheet (SDS), EU

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.

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

#### 1.1. Product identifier

Product form : Mixture  
Trade name : PC15 Water Clear PU Casting Resin Part B  
Product code : PC15

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

##### 1.2.1. Relevant identified uses

Main use category : Industrial use, Professional use  
Use of the substance/mixture : Casting compound

##### 1.2.2. Uses advised against

No additional information available

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

Easy Composites Ltd  
Unit 39, Park Hall Business Village, Stoke on Trent,  
Staffordshire,  
ST3 5XA.  
United Kingdom.

Tel: +44 (0)1782 454499 -  
sales@easycomposites.com

#### 1.4. Emergency telephone number

Emergency number : +44 (0)1782 454499 (working hours only)

### SECTION 2: Hazards identification

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

##### Classification according to Regulation (EC) No. 1272/2008 [CLP]

Acute toxicity (inhalation:dust,mist) Category 3	H331
Skin corrosion/irritation, Category 2	H315
Serious eye damage/eye irritation, Category 2	H319
Respiratory sensitisation, Category 1	H334
Skin sensitisation, Category 1	H317
Specific target organ toxicity – Single exposure, Category 3, Respiratory tract irritation	H335

Full text of H- and EUH-statements: see section 16

##### Adverse physicochemical, human health and environmental effects

Toxic if inhaled. May cause respiratory irritation. Causes skin irritation. May cause an allergic skin reaction. Causes serious eye irritation. May cause allergy or asthma symptoms or breathing difficulties if inhaled.

#### 2.2. Label elements

##### Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP) :



GHS06

GHS08

Signal word (CLP) :

Danger

Contains	: Hexamethylene diisocyanate, oligomerisation product (isocyanurate type); hexamethylene-di-isocyanate; 4,4'-methylenedi(cyclohexyl isocyanate); dicyclohexylmethane-4,4'-di-isocyanate
Hazard statements (CLP)	: H315 - Causes skin irritation. H317 - May cause an allergic skin reaction. H319 - Causes serious eye irritation. H331 - Toxic if inhaled. H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled. H335 - May cause respiratory irritation.
Precautionary statements (CLP)	: P261 - Avoid breathing dust/fume/gas/mist/vapours/spray. P264 - Wash hands thoroughly after handling. P280 - Wear eye protection, protective clothing, protective gloves. P304+P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing. P321 - Specific treatment (see supplemental first aid instruction on this label). P342+P311 - If experiencing respiratory symptoms: Call a POISON CENTER or doctor.
Extra phrases	: As from 24 August 2023 adequate training is required before industrial or professional use.

### 2.3. Other hazards

Contains no PBT/vPvB substances  $\geq 0.1\%$  assessed in accordance with REACH Annex XIII

## SECTION 3: Composition/information on ingredients

### 3.1. Substances

Not applicable

### 3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
4,4'-methylenedi(cyclohexyl isocyanate); dicyclohexylmethane-4,4'-di-isocyanate substance with national workplace exposure limit(s) (GB)	CAS-No.: 5124-30-1 EC-No.: 225-863-2 EC Index-No.: 615-009-00-0 REACH-no: 01-2119457437-31	$\geq 50$	Acute Tox. 2 (Inhalation:dust,mist), H330 Skin Irrit. 2, H315 Eye Irrit. 2, H319 Resp. Sens. 1, H334 Skin Sens. 1, H317 STOT SE 3, H335
Hexamethylene diisocyanate, oligomerisation product (isocyanurate type) substance with national workplace exposure limit(s) (GB); substance with a Community workplace exposure limit	CAS-No.: 28182-81-2 EC-No.: 931-274-8 REACH-no: 01-2119485796-17	25 – 50	Acute Tox. 4 (Inhalation), H332 Skin Sens. 1, H317 STOT SE 3, H335
hexamethylene-di-isocyanate substance with national workplace exposure limit(s) (GB); substance with a Community workplace exposure limit	CAS-No.: 822-06-0 EC-No.: 212-485-8 EC Index-No.: 615-011-00-1 REACH-no: 01-211947571-37	0.05 – 1	Acute Tox. 4 (Oral), H302 Acute Tox. 3 (Inhalation), H331 Acute Tox. 3 (Inhalation:dust,mist), H331 Skin Irrit. 2, H315 Eye Irrit. 2, H319 Resp. Sens. 1, H334 Skin Sens. 1, H317 STOT SE 3, H335

### Specific concentration limits:

Name	Product identifier	Specific concentration limits
4,4'-methylenedi(cyclohexyl isocyanate); dicyclohexylmethane-4,4'-di-isocyanate	CAS-No.: 5124-30-1 EC-No.: 225-863-2 EC Index-No.: 615-009-00-0 REACH-no: 01-2119457437-31	( 0.5 $\leq$ C $\leq$ 100) Resp. Sens. 1, H334 ( 0.5 $\leq$ C $\leq$ 100) Skin Sens. 1, H317

Specific concentration limits:		
Name	Product identifier	Specific concentration limits
hexamethylene-di-isocyanate	CAS-No.: 822-06-0 EC-No.: 212-485-8 EC Index-No.: 615-011-00-1 REACH-no: 01-211947571-37	( 0.5 ≤C ≤ 100) Resp. Sens. 1, H334 ( 0.5 ≤C ≤ 100) Skin Sens. 1, H317

Full text of H- and EUH-statements: see section 16

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

First-aid measures general	: Call a poison center or a doctor if you feel unwell.
First-aid measures after inhalation	: Remove person to fresh air and keep comfortable for breathing. Call a doctor.
First-aid measures after skin contact	: Wash skin with plenty of water. Take off contaminated clothing. If skin irritation or rash occurs: Get medical advice/attention.
First-aid measures after eye contact	: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
First-aid measures after ingestion	: Call a poison center or a doctor if you feel unwell.

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

Symptoms/effects after inhalation	: May cause respiratory irritation. May cause allergy or asthma symptoms or breathing difficulties if inhaled.
Symptoms/effects after skin contact	: Irritation. May cause an allergic skin reaction.
Symptoms/effects after eye contact	: Eye irritation.

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

Treat symptomatically.

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

Suitable extinguishing media	: Water spray. Dry powder. Foam. Carbon dioxide.
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### 5.2. Special hazards arising from the substance or mixture

Hazardous decomposition products in case of fire	: Toxic fumes may be released.
--	--------------------------------

### 5.3. Advice for firefighters

Protection during firefighting	: Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.
--------------------------------	--

## SECTION 6: Accidental release measures

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

#### 6.1.1. For non-emergency personnel

Emergency procedures	: Ventilate spillage area. Avoid breathing dust/fume/gas/mist/vapours/spray. Avoid contact with skin and eyes.
----------------------	--

#### 6.1.2. For emergency responders

Protective equipment	: Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".
----------------------	---

### 6.2. Environmental precautions

Avoid release to the environment.



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

- Methods for cleaning up : Take up liquid spill into absorbent material.  
Other information : Dispose of materials or solid residues at an authorized site.

### 6.4. Reference to other sections

For further information refer to section 13.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

- Precautions for safe handling : Use only outdoors or in a well-ventilated area. Avoid breathing dust/fume/gas/mist/vapours/spray. Avoid contact with skin and eyes. Wear personal protective equipment.  
Hygiene measures : Wash contaminated clothing before reuse. Contaminated work clothing should not be allowed out of the workplace. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

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

- Storage conditions : Store locked up. Store in a well-ventilated place. Keep container tightly closed. Keep cool.

### 7.3. Specific end use(s)

No additional information available

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

#### 8.1.1 National occupational exposure and biological limit values

#### Hexamethylene diisocyanate, oligomerisation product (isocyanurate type) (28182-81-2)

##### EU - Indicative Occupational Exposure Limit (IOEL)

IOEL STEL	1 mg/m <sup>3</sup>
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##### United Kingdom - Occupational Exposure Limits

WEL STEL (OEL STEL)	1 mg/m <sup>3</sup>
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#### hexamethylene-di-isocyanate (822-06-0)

##### EU - Indicative Occupational Exposure Limit (IOEL)

IOEL TWA	0.075 mg/m <sup>3</sup>
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IOEL TWA [ppm]	0.01 ppm
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IOEL STEL	0.15 mg/m <sup>3</sup>
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IOEL STEL [ppm]	0.02 ppm
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##### United Kingdom - Occupational Exposure Limits

WEL TWA (OEL TWA) [1]	0.02 mg/m <sup>3</sup>
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WEL STEL (OEL STEL)	0.07 mg/m <sup>3</sup>
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#### 4,4'-methylenedi(cyclohexyl isocyanate); dicyclohexylmethane-4,4'-di-isocyanate (5124-30-1)

##### United Kingdom - Occupational Exposure Limits

WEL TWA (OEL TWA) [1]	0.02 mg/m <sup>3</sup>
-----------------------	------------------------

WEL STEL (OEL STEL)	0.07 mg/m <sup>3</sup>
---------------------	------------------------

### 8.1.2. Recommended monitoring procedures

No additional information available

### 8.1.3. Air contaminants formed

No additional information available

### 8.1.4. DNEL and PNEC

No additional information available

### 8.1.5. Control banding

No additional information available

## 8.2. Exposure controls

### 8.2.1. Appropriate engineering controls

**Appropriate engineering controls:**

Ensure good ventilation of the work station.

### 8.2.2. Personal protection equipment

**Personal protective equipment symbol(s):**



#### 8.2.2.1. Eye and face protection

**Eye protection:**

Safety glasses

#### 8.2.2.2. Skin protection

**Skin and body protection:**

Wear suitable protective clothing

**Hand protection:**

Protective gloves

#### 8.2.2.3. Respiratory protection

**Respiratory protection:**

[In case of inadequate ventilation] wear respiratory protection.

#### 8.2.2.4. Thermal hazards

No additional information available

### 8.2.3. Environmental exposure controls

**Environmental exposure controls:**

Avoid release to the environment.

## SECTION 9: Physical and chemical properties

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

Physical state	: Liquid
Colour	: Colourless.
Odour	: slight.
Odour threshold	: No data available
pH	: No data available
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: Not applicable
Freezing point	: No data available
Boiling point	: No data available
Flash point	: No data available
Auto-ignition temperature	: No data available

Decomposition temperature	: No data available
Flammability (solid, gas)	: Not applicable
Vapour pressure	: No data available
Relative vapour density at 20°C	: No data available
Relative density	: No data available
Density	: 1.08 – 1.13 g/cm <sup>3</sup> (25°C)
Solubility	: Water: Reacts with water
Partition coefficient n-octanol/water (Log Pow)	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: 100 – 150 mPa.s (25°C)
Explosive properties	: No data available
Oxidising properties	: No data available
Explosive limits	: No data available

### 9.2. Other information

No additional information available

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

### 10.2. Chemical stability

Stable under normal conditions.

### 10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

### 10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

### 10.5. Incompatible materials

No additional information available

### 10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

Acute toxicity (oral)	: Not classified
Acute toxicity (dermal)	: Not classified
Acute toxicity (inhalation)	: Toxic if inhaled.

#### Crystal Cast 1000B

ATE CLP (dust,mist)	0.54 mg/l/4h
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#### Hexamethylene diisocyanate, oligomerisation product (isocyanurate type) (28182-81-2)

LD50 oral rat	> 2500 mg/kg bodyweight Animal: rat, Animal sex: female, Guideline: OECD Guideline 423 (Acute Oral toxicity - Acute Toxic Class Method)
LD50 dermal rat	> 2000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity)
LD50 dermal rabbit	> 2000 mg/kg bodyweight Animal: rabbit, Guideline: other:

hexamethylene-di-isocyanate (822-06-0)	
LD50 oral rat	710 mg/kg Source: NCIS; Toxic Substances Information Report
LD50 dermal rat	> 7000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity)
LC50 Inhalation - Rat	0.124 mg/l air Animal: rat, Guideline: OECD Guideline 403 (Acute Inhalation Toxicity), Remarks on results: other., 95% CL: 111 - 140
LC50 Inhalation - Rat (Vapours)	0.24 mg/l Source: NCIS; Toxic Substances Information Report

4,4'-methylenedi(cyclohexyl isocyanate); dicyclohexylmethane-4,4'-di-isocyanate (5124-30-1)	
LD50 oral rat	18200 mg/kg
LD50 dermal rat	> 7000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity)
LC50 Inhalation - Rat (Dust/Mist)	0.33 mg/l/4h

Skin corrosion/irritation	: Causes skin irritation.
Serious eye damage/irritation	: Causes serious eye irritation.
Respiratory or skin sensitisation	: May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause an allergic skin reaction.
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
STOT-single exposure	: May cause respiratory irritation.

Hexamethylene diisocyanate, oligomerisation product (isocyanurate type) (28182-81-2)	
STOT-single exposure	May cause respiratory irritation.

hexamethylene-di-isocyanate (822-06-0)	
STOT-single exposure	May cause respiratory irritation.

4,4'-methylenedi(cyclohexyl isocyanate); dicyclohexylmethane-4,4'-di-isocyanate (5124-30-1)	
STOT-single exposure	May cause respiratory irritation.

STOT-repeated exposure : Not classified

Hexamethylene diisocyanate, oligomerisation product (isocyanurate type) (28182-81-2)	
NOAEC (inhalation, rat, vapour, 90 days)	3.3 mg/l/6h/day

Aspiration hazard : Not classified

## SECTION 12: Ecological information

### 12.1. Toxicity

Ecology - general	: The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment.
Hazardous to the aquatic environment, short-term (acute)	: Not classified
Hazardous to the aquatic environment, long-term (chronic)	: Not classified
Not rapidly degradable	

Hexamethylene diisocyanate, oligomerisation product (isocyanurate type) (28182-81-2)	
EC50 72h - Algae [1]	> 1000 mg/l Scenedesmus subspicatus
ErC50 algae	> 1000 mg/l Desmodesmus subspicatus

### 12.2. Persistence and degradability

No additional information available

### 12.3. Bioaccumulative potential

#### hexamethylene-di-isocyanate (822-06-0)

Partition coefficient n-octanol/water (Log Pow) 1.08 Source: ICSC

#### 4,4'-methylenedi(cyclohexyl isocyanate); dicyclohexylmethane-4,4'-di-isocyanate (5124-30-1)

Bioconcentration factor (BCF REACH) 7.3 (calculated value)

### 12.4. Mobility in soil

#### Hexamethylene diisocyanate, oligomerisation product (isocyanurate type) (28182-81-2)

Organic Carbon Normalized Adsorption Coefficient (Log Koc) 7.8

#### hexamethylene-di-isocyanate (822-06-0)

Mobility in soil 5 – 286 Source: ECHA

### 12.5. Results of PBT and vPvB assessment

No additional information available

### 12.6. Other adverse effects

No additional information available

## SECTION 13: Disposal considerations






### 13.1. Waste treatment methods

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.  
 European List of Waste (LoW) code : 08 05 01\* - waste isocyanates  
 HP Code : HP5 - "Specific Target Organ Toxicity (STOT)/Aspiration Toxicity:" waste which can cause specific target organ toxicity either from a single or repeated exposure, or which cause acute toxic effects following aspiration.  
 HP6 - "Acute Toxicity:" waste which can cause acute toxic effects following oral or dermal administration, or inhalation exposure.  
 HP4 - "Irritant – skin irritation and eye damage:" waste which on application can cause skin irritation or damage to the eye.  
 HP13 - "Sensitising:" waste which contains one or more substances known to cause sensitising effects to the skin or the respiratory organs.

## SECTION 14: Transport information

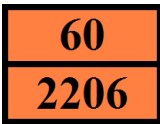

In accordance with ADR / IMDG / IATA / ADN / RID

ADR	IMDG	IATA	ADN	RID
<b>14.1. UN number</b>				
UN 2206	UN 2206	UN 2206	UN 2206	UN 2206
<b>14.2. UN proper shipping name</b>				
ISOCYANATES, TOXIC, N.O.S. (CONTAINS : 4,4'-methylenedi(cyclohexyl isocyanate); dicyclohexylmethane-4,4'-di-isocyanate)	ISOCYANATES, TOXIC, N.O.S. (CONTAINS : 4,4'-methylenedi(cyclohexyl isocyanate); dicyclohexylmethane-4,4'-di-isocyanate)	Isocyanates, toxic, n.o.s. (CONTAINS : 4,4'-methylenedi(cyclohexyl isocyanate); dicyclohexylmethane-4,4'-di-isocyanate)	ISOCYANATES, TOXIC, N.O.S. (CONTAINS : 4,4'-methylenedi(cyclohexyl isocyanate); dicyclohexylmethane-4,4'-di-isocyanate)	ISOCYANATES, TOXIC, N.O.S. (CONTAINS : 4,4'-methylenedi(cyclohexyl isocyanate); dicyclohexylmethane-4,4'-di-isocyanate)

ADR	IMDG	IATA	ADN	RID
<b>Transport document description</b>				
UN 2206 ISOCYANATES, TOXIC, N.O.S. (CONTAINS : 4,4'-methylenedi(cyclohexyl isocyanate); dicyclohexylmethane-4,4'-di-isocyanate), 6.1, III, (E)	UN 2206 ISOCYANATES, TOXIC, N.O.S. (CONTAINS : 4,4'-methylenedi(cyclohexyl isocyanate); dicyclohexylmethane-4,4'-di-isocyanate), 6.1, III	UN 2206 Isocyanates, toxic, n.o.s. (CONTAINS : 4,4'-methylenedi(cyclohexyl isocyanate); dicyclohexylmethane-4,4'-di-isocyanate), 6.1, III	UN 2206 ISOCYANATES, TOXIC, N.O.S. (CONTAINS : 4,4'-methylenedi(cyclohexyl isocyanate); dicyclohexylmethane-4,4'-di-isocyanate), 6.1, III	UN 2206 ISOCYANATES, TOXIC, N.O.S. (CONTAINS : 4,4'-methylenedi(cyclohexyl isocyanate); dicyclohexylmethane-4,4'-di-isocyanate), 6.1, III
<b>14.3. Transport hazard class(es)</b>				
6.1	6.1	6.1	6.1	6.1
				
<b>14.4. Packing group</b>				
III	III	III	III	III
<b>14.5. Environmental hazards</b>				
Dangerous for the environment: No	Dangerous for the environment: No Marine pollutant: No	Dangerous for the environment: No	Dangerous for the environment: No	Dangerous for the environment: No
No supplementary information available				

### 14.6. Special precautions for user

#### Overland transport

Classification code (ADR)	: T1
Special provisions (ADR)	: 274, 551
Limited quantities (ADR)	: 5I
Excepted quantities (ADR)	: E1
Packing instructions (ADR)	: P001, IBC03, LP01, R001
Mixed packing provisions (ADR)	: MP19
Portable tank and bulk container instructions (ADR)	: T7
Portable tank and bulk container special provisions (ADR)	: TP1, TP28
Tank code (ADR)	: L4BH
Tank special provisions (ADR)	: TU15, TE19
Vehicle for tank carriage	: AT
Transport category (ADR)	: 2
Special provisions for carriage - Packages (ADR)	: V12
Special provisions for carriage - Loading, unloading and handling (ADR)	: CV13, CV28
Special provisions for carriage - Operation (ADR)	: S9
Hazard identification number (Kemler No.)	: 60
Orange plates	:  
Tunnel restriction code (ADR)	: E
EAC code	: 2X

#### Transport by sea

Special provisions (IMDG)	: 223, 274
Limited quantities (IMDG)	: 5 L
Excepted quantities (IMDG)	: E1
Packing instructions (IMDG)	: P001, LP01

IBC packing instructions (IMDG)	: IBC03
Tank instructions (IMDG)	: T7
Tank special provisions (IMDG)	: TP1, TP13, TP28
EmS-No. (Fire)	: F-A
EmS-No. (Spillage)	: S-A
Stowage category (IMDG)	: E
Stowage and handling (IMDG)	: SW1, SW2
Properties and observations (IMDG)	: Liquids with a pungent odour. Immiscible with water but react with it to form carbon dioxide. Toxic if swallowed, by skin contact or by inhalation. If under deck, with mechanical ventilation, six air changes per hour, except when carried in closed containers, when two air changes per hour are required. Irritating to skin, eyes and mucous membranes.

### Air transport

PCA Excepted quantities (IATA)	: E1
PCA Limited quantities (IATA)	: Y642
PCA limited quantity max net quantity (IATA)	: 2L
PCA packing instructions (IATA)	: 655
PCA max net quantity (IATA)	: 60L
CAO packing instructions (IATA)	: 663
CAO max net quantity (IATA)	: 220L
Special provisions (IATA)	: A3
ERG code (IATA)	: 6L

### Inland waterway transport

Classification code (ADN)	: T1
Special provisions (ADN)	: 274, 551, 802
Limited quantities (ADN)	: 5 L
Excepted quantities (ADN)	: E1
Equipment required (ADN)	: PP, EP, TOX, A
Ventilation (ADN)	: VE02
Number of blue cones/lights (ADN)	: 0

### Rail transport

Classification code (RID)	: T1
Special provisions (RID)	: 274, 551
Limited quantities (RID)	: 5L
Excepted quantities (RID)	: E1
Packing instructions (RID)	: P001, IBC03, LP01, R001
Mixed packing provisions (RID)	: MP19
Portable tank and bulk container instructions (RID)	: T7
Portable tank and bulk container special provisions (RID)	: TP1, TP28
Tank codes for RID tanks (RID)	: L4BH
Special provisions for RID tanks (RID)	: TU15
Transport category (RID)	: 2
Special provisions for carriage – Packages (RID)	: W12
Special provisions for carriage - Loading, unloading and handling (RID)	: CW13, CW28, CW31
Colis express (express parcels) (RID)	: CE8
Hazard identification number (RID)	: 60

### 14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

Not applicable

### SECTION 15: Regulatory information

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

##### 15.1.1. EU-Regulations

###### REACH Annex XVII (Restriction List)

Contains no substance(s) listed on REACH Annex XVII (Restriction Conditions)

###### REACH Annex XIV (Authorisation List)

Contains no substance(s) listed on REACH Annex XIV (Authorisation List)

###### REACH Candidate List (SVHC)

Contains no substance(s) listed on the REACH Candidate List

###### PIC Regulation (Prior Informed Consent)

Contains no substance(s) listed on the PIC list (Regulation EU 649/2012 concerning the export and import of hazardous chemicals)

###### POP Regulation (Persistent Organic Pollutants)

Contains no substance(s) listed on the POP list (Regulation EU 2019/1021 on persistent organic pollutants)

###### Ozone Regulation (1005/2009)

Contains no substance(s) listed on the Ozone Depletion list (Regulation EU 1005/2009 on substances that deplete the ozone layer)

###### Explosives Precursors Regulation (2019/1148)

Contains no substance(s) listed on the Explosives Precursors list (Regulation EU 2019/1148 on the marketing and use of explosives precursors)

###### Drug Precursors Regulation (273/2004)

Contains no substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances)

##### 15.1.2. National regulations

No additional information available

#### 15.2. Chemical safety assessment

No chemical safety assessment has been carried out

### SECTION 16: Other information

#### Abbreviations and acronyms:

ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE	Acute Toxicity Estimate
BCF	Bioconcentration factor
BLV	Biological limit value
BOD	Biochemical oxygen demand (BOD)
COD	Chemical oxygen demand (COD)
DMEL	Derived Minimal Effect level
DNEL	Derived-No Effect Level
EC-No.	European Community number
EC50	Median effective concentration
EN	European Standard
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association



### Abbreviations and acronyms:

IMDG	International Maritime Dangerous Goods
LC50	Median lethal concentration
LD50	Median lethal dose
LOAEL	Lowest Observed Adverse Effect Level
NOAEC	No-Observed Adverse Effect Concentration
NOAEL	No-Observed Adverse Effect Level
NOEC	No-Observed Effect Concentration
OECD	Organisation for Economic Co-operation and Development
OEL	Occupational Exposure Limit
PBT	Persistent Bioaccumulative Toxic
PNEC	Predicted No-Effect Concentration
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
SDS	Safety Data Sheet
STP	Sewage treatment plant
ThOD	Theoretical oxygen demand (ThOD)
TLM	Median Tolerance Limit
VOC	Volatile Organic Compounds
CAS-No.	Chemical Abstract Service number
N.O.S.	Not Otherwise Specified
vPvB	Very Persistent and Very Bioaccumulative
ED	Endocrine disrupting properties

### Full text of H- and EUH-statements:

Acute Tox. 2 (Inhalation:dust,mist)	Acute toxicity (inhalation:dust,mist) Category 2
Acute Tox. 3 (Inhalation)	Acute toxicity (inhal.), Category 3
Acute Tox. 3 (Inhalation:dust,mist)	Acute toxicity (inhalation:dust,mist) Category 3
Acute Tox. 4 (Inhalation)	Acute toxicity (inhal.), Category 4
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
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.
H332	Harmful if inhaled.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H335	May cause respiratory irritation.

### Full text of H- and EUH-statements:

Resp. Sens. 1	Respiratory sensitisation, Category 1
Skin Irrit. 2	Skin corrosion/irritation, Category 2
Skin Sens. 1	Skin sensitisation, Category 1
STOT SE 3	Specific target organ toxicity – Single exposure, Category 3, Respiratory tract irritation

Safety Data Sheet (SDS), EU

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.