

## SAFETY DATA SHEET

## PU Dark 422

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

## 1.1. Product identifier

## Trade name

PU Dark 422

## Unique formula identifier (UFI)

6PWQ-F4D6-700X-F021

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

## Relevant identified uses of the substance or mixture

Water resistant D4 for wood, metal, rigid plastic etc.

## ▼ Uses advised against

None known.

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

## ▼ Company and address

**Dana Lim A/S**

Københavnsvej 220

DK-4600 Køge

Denmark

Tel: +45 56 64 00 70

## Contact person

Product Safety Department

## E-mail

info@danalim.dk

## Revision

30/12/2022

## SDS Version

3.0

## Date of previous version

11/02/2022 (2.0)

## 1.4. Emergency telephone number

Contact The National Poisons Information Service (dial 111, 24 h service).

See section 4 "First aid measures".

## SECTION 2: Hazards identification

## 2.1. Classification of the substance or mixture

Skin Irrit. 2; H315, Causes skin irritation.

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

Eye Irrit. 2; H319, Causes serious eye irritation.

Acute Tox. 4; H332, Harmful if inhaled.

Resp. Sens. 1; H334, May cause allergy or asthma symptoms or breathing difficulties if inhaled.

STOT SE 3; H335, May cause respiratory irritation.

Carc. 2; H351, Suspected of causing cancer.

STOT RE 2; H373, May cause damage to organs through prolonged or repeated exposure.

Aquatic Chronic 3; H412, Harmful to aquatic life with long lasting effects.

## 2.2. Label elements

## Hazard pictogram(s)



## Signal word

Danger

#### Hazard statement(s)

- Causes skin irritation. (H315)
- May cause an allergic skin reaction. (H317)
- Causes serious eye irritation. (H319)
- Harmful if inhaled. (H332)
- May cause allergy or asthma symptoms or breathing difficulties if inhaled. (H334)
- May cause respiratory irritation. (H335)
- Suspected of causing cancer. (H351)
- May cause damage to organs through prolonged or repeated exposure. (H373)
- Harmful to aquatic life with long lasting effects. (H412)

#### Safety statement(s)

##### General

- If medical advice is needed, have product container or label at hand. (P101)
- Keep out of reach of children. (P102)

##### Prevention

- Use only outdoors or in a well-ventilated area. (P271)
- Wear eye protection/protective gloves. (P280)

##### Response

- IF INHALED: Remove person to fresh air and keep comfortable for breathing. (P304+P340)
- If experiencing respiratory symptoms: Call a POISON CENTER/doctor (P342+P311)

##### Storage

-

##### Disposal

-

#### Hazardous substances

- Prepolymer based on aromatic polyisocyanate
- Diphenyl methane diisocyanate, isomers and homologues

##### ▼ Additional labelling

- EUH204, Contains isocyanates. May produce an allergic reaction.
- Please use the attached protective gloves! Maximum period of use: 5 minutes. Throw away after use, do not re-use.
- Persons already sensitised to diisocyanates may develop allergic reactions when using this product. Persons suffering from asthma, eczema or skin problems should avoid contact, including dermal contact, with this product. This product should not be used under conditions of poor ventilation unless a protective mask with an appropriate gas filter (e.g. type A1 according to standard EN 14387) is used.
- As from 24 August 2023 adequate training is required before industrial or professional use.
- UFI: 6PWQ-F4D6-700X-F021

#### 2.3. Other hazards

##### ▼ Additional warnings

- This mixture/product does not contain any substances considered to meet the criteria classifying them as PBT and/or vPvB.
- This product does not contain any substances considered to be endocrine disruptors in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605.

### SECTION 3: Composition/information on ingredients

#### 3.1. ▼ Substances

Not applicable. This product is a mixture.

#### 3.2. ▼ Mixtures

Product/substance	Identifiers	% w/w	Classification	Note
Prepolymer based on aromatic polyisocyanate	CAS No.: 67815-87-6 EC No.: UK-REACH: Index No.:	40-60%	Skin Irrit. 2, H315 Skin Sens. 1, H317 Eye Irrit. 2, H319 Acute Tox. 4, H332 Resp. Sens. 1, H334 STOT SE 3, H335 STOT RE 2, H373 Aquatic Chronic 3, H412	
Diphenyl methane diisocyanate, isomers and	CAS No.: 9016-87-9 EC No.: 618-498-9	25-40%	Skin Irrit. 2, H315 Skin Sens. 1, H317	

According to EC-Regulation 1907/2006 (REACH), annex II, including changes implemented by EC-Regulation 2020/878

homologues	UK-REACH: Index No.:		Eye Irrit. 2, H319 Acute Tox. 4, H332 Resp. Sens. 1, H334 STOT SE 3, H335 Carc. 2, H351 STOT RE 2, H373	
4,4´ - methyldiphenyldiisocyanat	CAS No.: 101-68-8 EC No.: 202-966-0 UK-REACH: Index No.: 615-005-00-9	3-5%	Skin Irrit. 2, H315 (SCL: 5.00 %) Skin Sens. 1, H317 Eye Irrit. 2, H319 (SCL: 5.00 %) Acute Tox. 4, H332 Resp. Sens. 1, H334 (SCL: 0.10 %) STOT SE 3, H335 (SCL: 5.00 %) Carc. 2, H351 STOT RE 2, H373	[3]
diphenylmethan-2,4´ - diisocyanat	CAS No.: 5873-54-1 EC No.: 227-534-9 UK-REACH: Index No.: 615-005-00-9	3-5%	Skin Irrit. 2, H315 (SCL: 5.00 %) Skin Sens. 1, H317 Eye Irrit. 2, H319 (SCL: 5.00 %) Acute Tox. 4, H332 Resp. Sens. 1, H334 (SCL: 0.10 %) STOT SE 3, H335 (SCL: 5.00 %) Carc. 2, H351 STOT RE 2, H373	[3]
2,2´ - methyldiphenyldiisocyanat	CAS No.: 2536-05-2 EC No.: 219-799-4 UK-REACH: Index No.: 615-005-00-9	<1%	Skin Irrit. 2, H315 (SCL: 5.00 %) Skin Sens. 1, H317 Eye Irrit. 2, H319 (SCL: 5.00 %) Acute Tox. 4, H332 Resp. Sens. 1, H334 (SCL: 0.10 %) STOT SE 3, H335 (SCL: 5.00 %) Carc. 2, H351 STOT RE 2, H373	[3]

See full text of H-phrases in section 16. Occupational exposure limits are listed in section 8, if these are available.

#### Other information

[3] According to UK REACH, Annex XVII, the substance is subject to restrictions.

### SECTION 4: First aid measures

#### 4.1. Description of first aid measures

##### General information

In the case of accident: Contact a doctor or casualty department – take the label or this safety data sheet.  
Contact a doctor if in doubt about the injured person's condition or if the symptoms persist. Never give an unconscious person water or other drink.

##### Inhalation

Upon breathing difficulties or irritation of the respiratory tract: Bring the injured person into fresh air. Make sure the injured person is continuously monitored. Prevent shock by keeping the injured person warm and calm. If breathing ceases, give mouth-to-mouth resuscitation. If unconscious, roll the injured person into recovery position. Call an ambulance.

##### Skin contact

Remove contaminated clothing and shoes immediately. Ensure to wash exposed skin thoroughly with water and soap. Skin cleanser can be used. DO NOT use solvents or thinners.  
If skin irritation occurs: Get medical advice/attention.

##### Eye contact

Upon irritation of the eye: Remove contact lenses. Flush eyes immediately with plenty of water or isotonic water (20-30 °C) for at least 5 minutes and continue until irritation stops. Make sure to flush under upper and lower eyelids. If irritation continues, contact a doctor. Continue flushing during transport.

##### ▼ Ingestion

Provide plenty of water for the person to drink and stay with him/her. In case of malaise, seek medical advice immediately and bring the safety data sheet or label from the product. Do not induce vomiting, unless recommended by the doctor. Have the person lean forward with head down to avoid inhalation of or choking on

vomited material.

▼ Burns

Not applicable.

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

Sensitisation: This product contains substances, which may trigger allergic reaction upon dermal contact. Manifestation of allergic reactions typically takes place within 12-72 hours after exposure.

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

IF exposed or concerned:

Get immediate medical advice/attention.

Information to medics

Bring this safety data sheet or the label from this product.

## SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media: Alcohol-resistant foam, carbon dioxide, powder, water mist.

Unsuitable extinguishing media: Waterjets should not be used, since they can spread the fire.

5.2. ▼ Special hazards arising from the substance or mixture

Fire will result in dense smoke. Exposure to combustion products may harm your health. Closed containers, which are exposed to fire, should be cooled with water. Do not allow fire-extinguishing water to enter the sewage system and nearby surface waters.

If the product is exposed to high temperatures, e.g. in the event of fire, dangerous decomposition compounds are produced. These are:

Nitrogen oxides (NO<sub>x</sub>)

Carbon oxides (CO / CO<sub>2</sub>)

5.3. Advice for firefighters

Wear self-contained breathing apparatus and protective clothing to prevent contact. Upon direct exposure contact The National Poisons Information Service (dial 111, 24 h service) in order to obtain further advice.

## SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Avoid direct contact with spilled substances.

Avoid inhalation of vapours from spilled material.

6.2. Environmental precautions

Avoid discharge to lakes, streams, sewers, etc. In the event of leakage to the surroundings, contact local environmental authorities.

6.3. ▼ Methods and material for containment and cleaning up

Use sand, earth, vermiculite, diatomaceous earth to contain and collect non-combustible absorbent materials and place in container for disposal, according to local regulations.

Wherever possible cleaning should be performed with normal cleaning agents. Avoid use of solvents.

6.4. ▼ Reference to other sections

See section 13 "Disposal considerations" on handling of waste.

See section 8 "Exposure controls/personal protection" for protective measures.

## SECTION 7: Handling and storage

7.1. ▼ Precautions for safe handling

It is recommended to install waste collection trays in order to prevent emissions to the waste water system and surrounding environment.

Avoid direct contact with the product.

Smoking, drinking and consumption of food is not allowed in the work area.

See section 8 "Exposure controls/personal protection" for information on personal protection.

7.2. Conditions for safe storage, including any incompatibilities

Containers that have been opened must be carefully resealed and kept upright to prevent leakage.

Recommended storage material

Always store in containers of the same material as the original container.

Storage temperature

> 0°C

Incompatible materials

According to EC-Regulation 1907/2006 (REACH), annex II, including changes implemented by EC-Regulation 2020/878

Strong acids, strong bases, strong oxidizing agents, and strong reducing agents.

### 7.3. ▼ Specific end use(s)

This product should only be used for applications quoted in section 1.2.

## SECTION 8: Exposure controls/personal protection

### 8.1. ▼ Control parameters

4,4'-methylendiphenyldiisocyanat

Long term exposure limit (8 hours) (mg/m<sup>3</sup>): 0,02

Short term exposure limit (15 minutes) (mg/m<sup>3</sup>): 0,07

The Control of Substances Hazardous to Health Regulations 2002. SI 2002/2677 The Stationery Office 2002.  
EH40/2005 Workplace exposure limits (Fourth Edition 2020).

#### ▼ DNEL

4,4'-methylendiphenyldiisocyanat

Duration	Route of exposure	DNEL
Long term - Local effects - General population	Inhalation	25 µg/m <sup>3</sup>
Long term - Local effects - Workers	Inhalation	50 µg/m <sup>3</sup>
Short term - Local effects - General population	Inhalation	50 µg/m <sup>3</sup>
Short term - Local effects - Workers	Inhalation	100 µg/m <sup>3</sup>

diphenylmethan-2,4'-diisocyanat

Duration	Route of exposure	DNEL
Long term - Local effects - General population	Inhalation	0,025 mg/m <sup>3</sup>
Long term - Local effects - Workers	Inhalation	0,05 mg/m <sup>3</sup>
Short term - Local effects - General population	Inhalation	0,05 mg/m <sup>3</sup>
Short term - Local effects - Workers	Inhalation	0,1 mg/m <sup>3</sup>

#### ▼ PNEC

4,4'-methylendiphenyldiisocyanat

Route of exposure	Duration of Exposure	PNEC
Freshwater		0,0037 mg/L
Freshwater		3.7 µg/L
Freshwater sediment		11,7 mg/kg
Freshwater sediment		1,17 mg/kg
Freshwater sediment		11.7 mg/kg
Intermittent release (freshwater)		37 µg/L
Marine water		0,00037 mg/L
Marine water		370 ng/L
Marine water sediment		1.17 mg/kg
Predators		
Soil		2,33 mg/kg
Soil		2.33 mg/kg
Water		0,037 mg/L

diphenylmethan-2,4'-diisocyanat

Route of exposure	Duration of Exposure	PNEC
Freshwater		1 mg/l
Intermittent release		10 mg/l
Marine water		0,1 mg/l
Sewage treatment plant		1 mg/l

According to EC-Regulation 1907/2006 (REACH), annex II, including changes implemented by EC-Regulation 2020/878

Soil

1 mg/kg dryweight

## 8.2. ▼ Exposure controls

Compliance with the given occupational exposure limits values should be controlled on a regular basis.

### General recommendations

Smoking, drinking and consumption of food is not allowed in the work area.

### Exposure scenarios

There are no exposure scenarios implemented for this product.

### ▼ Exposure limits

Professional users are subjected to the legally set maximum concentrations for occupational exposure. See occupational hygiene limit values above.

### Appropriate technical measures

Do not recirculate outlet air that contain the substances.

### Hygiene measures

Take off contaminated clothing and wash it before reuse.

### Measures to avoid environmental exposure


Keep damming materials near the workplace. If possible, collect spillage during work.

## 8.3. Individual protection measures, such as personal protective equipment

### ▼ Generally

Persons already sensitised to diisocyanates may develop allergic reactions when using this product. Persons suffering from asthma, eczema or skin problems should avoid contact, including dermal contact, with this product. This product should not be used under conditions of poor ventilation unless a protective mask with an appropriate gas filter (e.g. type A1 according to standard EN 14387) is used. Use only UKCA marked protective equipment.


### Respiratory Equipment

Type	Class	Colour	Standards	
A	Class 1 (low capacity)	Brown	EN14387	

### ▼ Skin protection

No specific requirements.

### Hand protection

Material	Glove thickness (mm)	Breakthrough time (min.)	Standards	
Nitrile	0.4	> 480	EN374-2, EN374-3, EN388	

### Eye protection

Type	Standards	
Safety glasses with side shields.	EN166	

## SECTION 9: Physical and chemical properties

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

#### Physical state

Liquid

#### Colour

Deep brown

#### Odour / Odour threshold

Characteristic

### ▼ pH

Testing not relevant or not possible due to the nature of the product.

#### Density (g/cm<sup>3</sup>)

1.15

**Kinematic viscosity**

5400 mPa.s

**Particle characteristics**

Does not apply to liquids.

**Phase changes**

▼ **Melting point/Freezing point (°C)**

Testing not relevant or not possible due to the nature of the product.

**Softening point/range (waxes and pastes) (°C)**

Does not apply to liquids.

**Boiling point (°C)**

368

▼ **Vapour pressure**

Testing not relevant or not possible due to the nature of the product.

▼ **Relative vapour density**

Testing not relevant or not possible due to the nature of the product.

▼ **Decomposition temperature (°C)**

Testing not relevant or not possible due to the nature of the product.

**Data on fire and explosion hazards**

**Flash point (°C)**

250

▼ **Auto-Ignition (°C)**

Testing not relevant or not possible due to the nature of the product.

▼ **Flammability (°C)**

Testing not relevant or not possible due to the nature of the product.

▼ **Lower and upper explosion limit (% v/v)**

Testing not relevant or not possible due to the nature of the product.

**Solubility**

▼ **Solubility in water**

Testing not relevant or not possible due to the nature of the product.

▼ **n-octanol/water coefficient**

Testing not relevant or not possible due to the nature of the product.

▼ **Solubility in fat (g/L)**

Testing not relevant or not possible due to the nature of the product.

**9.2. Other information**

▼ **Other physical and chemical parameters**

No data available.

**SECTION 10: Stability and reactivity**

**10.1. ▼ Reactivity**

No data available.

**10.2. Chemical stability**

The product is stable under the conditions, noted in section 7 "Handling and storage".

**10.3. ▼ Possibility of hazardous reactions**

None known.

**10.4. ▼ Conditions to avoid**

None known.

**10.5. Incompatible materials**

Strong acids, strong bases, strong oxidizing agents, and strong reducing agents.

**10.6. Hazardous decomposition products**

The product is not degraded when used as specified in section 1.

**SECTION 11: Toxicological information**

**11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008**

**Acute toxicity**

Product/substance	Prepolymer based on aromatic polyisocyanate
Test method	
Species	Rat
Route of exposure	Oral

According to EC-Regulation 1907/2006 (REACH), annex II, including changes implemented by EC-Regulation 2020/878

Test	LD50
Result	> 5.000 mg/kg ·
Other information	

Product/substance	Diphenyl methane diisocyanate, isomers and homologues
Test method	
Species	Rat
Route of exposure	Oral
Test	LD50
Result	>2000 mg/kg ·
Other information	

Product/substance	Diphenyl methane diisocyanate, isomers and homologues
Test method	
Species	Rat
Route of exposure	Inhalation
Test	LC50
Result	490 mg/m <sup>3</sup> , 4h ·
Other information	

Product/substance	4,4´-methyldiphenyldiisocyanat
Test method	
Species	Rat
Route of exposure	Oral
Test	LD50
Result	>2000 mg/kg ·
Other information	

Product/substance	4,4´-methyldiphenyldiisocyanat
Test method	
Species	Rabbit
Route of exposure	Dermal
Test	LD50
Result	>9400 mg/kg ·
Other information	

Product/substance	4,4´-methyldiphenyldiisocyanat
Test method	
Species	Rat
Route of exposure	Inhalation
Test	LD50
Result	0,368 mg/l (dust) ·
Other information	

Harmful if inhaled.

**Skin corrosion/irritation**

Causes skin irritation.

**Serious eye damage/irritation**

Causes serious eye irritation.

**Respiratory sensitisation**

Product/substance	4,4´-methyldiphenyldiisocyanat
Test method	
Species	Guinea pig
Result	Adverse effect observed (sensitising)
Other information	

**Skin sensitisation**

Product/substance	4,4´-methyldiphenyldiisocyanat
Test method	OECD 429
Species	
Result	Adverse effect observed (sensitising)
Other information	

**Germ cell mutagenicity**

Based on available data, the classification criteria are not met.

**Carcinogenicity**

Product/substance	4,4´-methyldiphenyldiisocyanat
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According to EC-Regulation 1907/2006 (REACH), annex II, including changes implemented by EC-Regulation 2020/878

Test method	OECD 453
Species	Rat
Route of exposure	
Target organ	
Duration	
Test	OECD 453
Result	Tumors in highest dosis group
Conclusion	Adverse effect observed
Other information	

Suspected of causing cancer.

#### Reproductive toxicity

Product/substance	4,4'-methylendiphenyldiisocyanat
Test method	
Species	Rat
Duration	
Test	OECD TG 414
Result	No adverse effect observed
Conclusion	No adverse effect observed
Other information	

#### STOT-single exposure

May cause respiratory irritation.

#### STOT-repeated exposure

May cause damage to organs through prolonged or repeated exposure.

#### Aspiration hazard

Based on available data, the classification criteria are not met.

#### 11.2. Information on other hazards

##### Long term effects

**Carcinogenic effects:** This product contains substances considered or proven to be carcinogenic. The carcinogenic effects may be triggered subsequent to exposure through inhalation, skin contact or ingestion.

**Irritation effects:** This product contains substances, which may cause irritation upon exposure to skin, eyes or lungs.

Exposure may result in an increased absorption potential of other hazardous substances at the area of exposure.

##### ▼ Endocrine disrupting properties

None known.

##### Other information

Diphenyl methane diisocyanate, isomers and homologues has been classified by IARC as a group 3 carcinogen.

4,4'-methylendiphenyldiisocyanat has been classified by IARC as a group 3 carcinogen.

## SECTION 12: Ecological information

### 12.1. Toxicity

Product/substance	Diphenyl methane diisocyanate, isomers and homologues
Test method	
Species	Daphnia
Compartment	
Duration	24 hours
Test	EC50
Result	>1000 mg/l ·
Other information	

Product/substance	Diphenyl methane diisocyanate, isomers and homologues
Test method	
Species	
Compartment	
Duration	3 hours
Test	EC50
Result	>100 mg/l ·
Other information	

### 12.2. Persistence and degradability

Product/substance	4,4'-methylendiphenyldiisocyanat
Biodegradable	No
Test method	
Result	

According to EC-Regulation 1907/2006 (REACH), annex II, including changes implemented by EC-Regulation 2020/878

### 12.3. ▼ Bioaccumulative potential

Product/substance 4,4'-methylendiphenyldiisocyanat  
 Test method  
 Potential bioaccumulation No  
 LogPow No data available.  
 BCF No data available.  
 Other information

### 12.4. ▼ Mobility in soil

No data available.

### 12.5. Results of PBT and vPvB assessment

This mixture/product does not contain any substances considered to meet the criteria classifying them as PBT and/or vPvB.

### 12.6. ▼ Endocrine disrupting properties

None known.

### 12.7. Other adverse effects

This product contains substances, which may cause adverse long-term effects to the aquatic environment.

## SECTION 13: Disposal considerations

### ▼ Waste treatment methods

Product is covered by the regulations on hazardous waste.  
 HP 4 - Irritant (skin irritation and eye damage)  
 HP 5 - Specific Target Organ Toxicity (STOT)/Aspiration Toxicity  
 HP 6 - Acute toxicity  
 HP 7 - Carcinogenic  
 HP 13 - Sensitising  
 HP 14 - Ecotoxic  
 Dispose of contents/container to an approved waste disposal plant.  
 Regulation (EU) No 1357/2014 of 18 December 2014 on waste as retained and amended in UK law.

### EWC code

08 05 01\* Waste isocyanates

### ▼ Specific labelling

Not applicable.

### Contaminated packing

Packaging containing residues of the product must be disposed of similarly to the product.

## SECTION 14: Transport information

	14.1 UN / ID	14.2 UN proper shipping name	14.3 Hazard class(es)	14.4 PG*	14.5 Env**	Other information
ADR	-	-	-	-	-	-
IMDG	-	-	-	-	-	-
IATA	-	-	-	-	-	-

\* Packing group

\*\* Environmental hazards

### ▼ Additional information

Not dangerous goods according to ADR, IATA and IMDG.

### 14.6. ▼ Special precautions for user

Not applicable.

### 14.7. ▼ Maritime transport in bulk according to IMO instruments

No data available.

## SECTION 15: Regulatory information

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

#### Restrictions for application

People under the age of 18 shall not be exposed to this product.

According to EC-Regulation 1907/2006 (REACH), annex II, including changes implemented by EC-Regulation 2020/878

Pregnant women and women breastfeeding must not be exposed to this product. The risk, and possible technical precautions or design of the workplace needed to eliminate exposure, must be considered.

#### Demands for specific education

Use of this product requires dedicated training in work with polyurethane and epoxy products.

#### ▼ SEVESO - Categories / dangerous substances

Not applicable.

#### Additional information

Tactile warning.

#### ▼ Sources

The Management of Health and Safety at Work Regulations 1999.

The Health and Safety at Work etc. Act 1974 Regulations 2013.

Regulation (EU) No 1357/2014 of 18 December 2014 on waste as retained and amended in UK law.

Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures (CLP) as retained and amended in UK law.

Regulation (EC) No 1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) as retained and amended in UK law.

#### 15.2. Chemical safety assessment

No

### SECTION 16: Other information

#### Full text of H-phrases as mentioned in section 3

H315, Causes skin irritation.

H317, May cause an allergic skin reaction.

H319, Causes serious eye irritation.

H332, Harmful if inhaled.

H334, May cause allergy or asthma symptoms or breathing difficulties if inhaled.

H335, May cause respiratory irritation.

H351, Suspected of causing cancer.

H373, May cause damage to organs through prolonged or repeated exposure.

H412, Harmful to aquatic life with long lasting effects.

#### ▼ Abbreviations and acronyms

ADN = European Provisions concerning the International Carriage of Dangerous Goods by Inland Waterway

ADR = The European Agreement concerning the International Carriage of Dangerous Goods by Road

ATE = Acute Toxicity Estimate

BCF = Bioconcentration Factor

CAS = Chemical Abstracts Service

CE = Conformité Européenne

CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]

CSA = Chemical Safety Assessment

CSR = Chemical Safety Report

DMEL = Derived Minimal Effect Level

DNEL = Derived No Effect Level

EINECS = European Inventory of Existing Commercial chemical Substances

ES = Exposure Scenario

EUH statement = CLP-specific Hazard statement

EWC = European Waste Catalogue

GHS = Globally Harmonized System of Classification and Labelling of Chemicals

IARC = International Agency for Research on Cancer (IARC)

IATA = International Air Transport Association

IBC = Intermediate Bulk Container

IMDG = International Maritime Dangerous Goods

LogPow = logarithm of the octanol/water partition coefficient

MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)

OECD = Organisation for Economic Co-operation and Development

PBT = Persistent, Bioaccumulative and Toxic

PNEC = Predicted No Effect Concentration

RID = The Regulations concerning the International Carriage of Dangerous Goods by Rail

RRN = REACH Registration Number

SCL = A specific concentration limit

SVHC = Substances of Very High Concern

According to EC-Regulation 1907/2006 (REACH), annex II, including changes implemented by EC-Regulation 2020/878

STOT-RE = Specific Target Organ Toxicity - Repeated Exposure

STOT-SE = Specific Target Organ Toxicity - Single Exposure

TWA = Time weighted average

UN = United Nations

UVBC = Unknown or variable composition, complex reaction products or of biological materials

VOC = Volatile Organic Compound

vPvB = Very Persistent and Very Bioaccumulative

▼ **Additional information**

The classification of the substance/mixture in regard of health hazards are in accordance with the calculation methods given by Regulation (EC) No. 1272/2008 (CLP) as retained and amended in UK law.

The classification of the substance/mixture in regard of environmental hazards are in accordance with the calculation methods given by Regulation (EC) No. 1272/2008 (CLP) as retained and amended in UK law.

▼ **The safety data sheet is validated by**

Product Safety Department

**Other**

A change (in proportion to the last essential change (first cipher in SDS version, see section 1)) is marked with a blue triangle.

The information in this safety data sheet applies only to this specific product (mentioned in section 1) and is not necessarily correct for use with other chemicals/products.

It is recommended to hand over this safety data sheet to the actual user of the product. Information in this safety data sheet cannot be used as a product specification.

Country-language: GB-en