

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

**1.1 Product identifier**

Trade name: **TRUglue®**  
Reference-no.: 1512.000.04.22  
Article-No.: 75005, 75006, 75007, E75005, E75006, E75007, BF75005, BF75006, BF75007

Nanoform: The product contains no nanoparticles.

**1.2 Relevant identified uses of the substance or mixture and uses advised against:**  
This product may only be used in the manner provided. A liability for improper application is excluded.  
This MSDS is exclusively for hazard information for health professionals.

**Application of the substance / the preparation:**

 (Please note the application instructions.)

Medical wound adhesive.

Uses advised against: Currently not defined.

**1.3 Details of the supplier of the safety data sheet**

Manufacturer / Supplier: MEYER - HAAKE GmbH  
Medical Innovations  
Daimlerstraße 4  
D-61239 Ober-Mörlen

Informing department: Quality Management: ☎ ++49 - 6002 / 99270 - 0 [info@meyer-haake.com]

**1.4 Emergency telephone number**

Manufacturer / Supplier: Quality Management: ☎ ++49 - 6002 / 99270 - 0 [Mon to Thu: 08:00 to 17:00 h; Fri: 08:00 to 14:30 h]

**Poison Control Center:**

England and Wales: NHS Direct - 0845 4647  
Scotland: NHS 24 - 08454 24 24 24

**SECTION 2: Hazards identification**

**2.1 Classification of the substance or mixture**

The GB CLP classification of this product corresponds to the 16th + 17th ATP (EU).  
The classification of the product may not conform to NHS regulations for Great Britain and Northern Ireland.

**Classification according to Regulation (EC) No 1272/2008 [CLP]:**



Skin Irrit. 2 H315 Causes skin irritation.  
Eye Irrit. 2 H319 Causes serious eye irritation.  
STOT SE 3 H335 May cause respiratory irritation.

**2.2 Label elements**

**2.2.1 Labelling according to Regulation (EC) No 1272/2008 [CLP]:** The product is classified and labelled according to the GB CLP regulation.

**Hazard pictograms:**

(See section 2.1)  
GHS07

Signal word: Warning

**Hazard-determining components of labelling:**

Ethyl 2-cyanoacrylate

**Precautionary statements:**

P101 If medical advice is needed, have product container or label at hand.  
P102 Keep out of reach of children.  
P103 Read carefully and follow all instructions.  
P261 Avoid breathing mist/vapours/spray.  
P280 Wear protective gloves / eye protection / face protection.  
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P321 Specific treatment (see on this label).  
P405 Store locked up.  
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

**Additional information:**

EUH202 Cyanoacrylate. Danger. Bonds skin and eyes in seconds. Keep out of the reach of children.

**2.2.2 Labelling of packages where the contents do not exceed 125 ml:** The product is subject to labeling according to the GB CLP regulation.

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**2.2.3 Information pertaining to particular dangers for man and environment:**  
Components of the product may be absorbed through the skin.  
The product supports combustion.

**2.3 Other hazards**  
See subsections 2.3.1 to 2.3.2  
The product contains flammable components.

**2.3.1 Skin resorptive ingredients:**

None of the ingredients are listed.

**2.3.2 Notas CMR:** The product does not contain any listed substances.

**2.3.3 PBT, vPvB and SVHC ingredients:** Not applicable.

**PBT:** Not applicable.

**vPvB:** Not applicable.

**SVHC (Substances of Very High Concern):**

None of the ingredients are listed.

## SECTION 3: Composition/information on ingredients

### 3.1 Chemical characterisation: Mixtures

Description: Acrylate adhesive

Dangerous components: The product contains the following hazardous ingredients:

CAS No.	Designation / Identification	%
CAS: 7085-85-0	Ethyl 2-cyanoacrylate ⚠ Skin Irrit. 2, H315; Eye Irrit. 2, H319; STOT SE 3, H335 Specific concentration limit.: STOT SE 3; H335: C ≥ 10 %	85 – < 95%

## SECTION 4: First aid measures

### 4.1 Description of first aid measures



#### 4.1.1 General informations:

Self-protection of the rescuer (suitable gloves, mouth-nose mask, ..)



Rescue the victim from the danger area immediately.

If the patient feels unwell, consult a doctor and present this data sheet. Inform the doctor about the measures taken.



Remove contaminated clothing immediately.

Do not remove clothing or materials burnt into the skin!

**4.1.2 After inhalation:** Supply fresh air; consult doctor in case of symptoms.

**4.1.3 After skin contact:** Instantly wash with water and soap and rinse thoroughly.

**4.1.4 After eye contact:**

Protect the not injured eye.

Rinse opened eye for several minutes under running water. Then consult doctor.

**4.1.5 After swallowing:**

Rinse mouth with water, do not swallow. Do not induce vomiting. Seek medical attention and present this data sheet.

Do not give milk or active charcoal.

In the event of unconsciousness, lay in a stable lateral position. If breathing has stopped, give rescue breaths.

**4.1.6 In case of burns:**

To relieve pain, immediately cool small burns the size of the palm of your hand with running tap water as possible.

Do not cool extensive burns or scalds with water. Cover skin areas with a sterile cloth. See a doctor immediately.

Do not bandage burns on the face. Do not remove burnt clothing from skin.

Do not open burn blisters. See a doctor.

**4.1.7 Injuries from stings or splinters:**

Lay the injured person comfortably on the floor and calm down.

Do not remove objects from the wound. Cover wounds aseptically.

Consult a doctor.

### 4.2 Information for the doctor



The following instructions are only for emergency medical treatment.

The medical measures may not be performed by first responders.

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**4.2.1 Most important symptoms and effects, both acute and delayed:** No further relevant information available.

**4.2.2 Risks:**

Danger of impaired breathing.

Cyanoacrylates give off heat during polymerization. Large-scale contamination can generate enough heat to cause burns.

**4.3 Indication of any immediate medical attention and special treatment needed:**

If swallowed, induce vomiting (if patient is conscious).

Bei Verschlucken Magenspülung.

Treat affected skin areas symptomatically.

## SECTION 5: Firefighting measures

### 5.1 Extinguishing media

Suitable extinguishing agents:



Carbon dioxide, extinguishing powder or water jet. Fight larger fires with water jet or alcohol-resistant foam.

For safety reasons unsuitable extinguishing agents: None.

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

In case of fire the following gases are released:

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

Carbon monoxide (CO)

### 5.3 Advice for firefighters

#### 5.3.1 Protective equipment:



Wear self-contained breathing apparatus.

Use tight protective suit.

5.3.2 Fire fighting information: Cool containers with water jet. Transport containers can burst explosively due to severe heat.

## SECTION 6: Accidental release measures

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



Remove unauthorised persons from the danger area.

6.2 Environmental precautions No special measures required.

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

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

Dispose of the material collected according to regulations.

Ensure adequate ventilation.

Dispose of contaminated material as waste according to item 13.

### 6.4 Reference to other sections

See Section 7 for information on safe handling.

See Section 8.2 for information on personal protective equipment.

See Section 13 for information on disposal.

## SECTION 7: Handling and storage

### 7.1 Precautions for safe handling



Do not eat, drink or smoke when processing the product.

Keep container tightly sealed.

7.1.1 Information about protection against explosions and fires: Do not smoke when processing.

7.1.2 Notes on workplace design and hygiene measures at the workplace: No information - medical device

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

7.2.1 Requirements to be met by storerooms and containers: Store only in the original container.

7.2.2 Information about storage in one common storage facility:



Do not store together with food, beverage or animal feed.

Store away from oxidising agents.

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7.2.3 Further information about storage conditions: Protect from moisture.

- Maximum storage temperature: 8°C
- Minimum storage temperature: -18°C
- Recommended storage temperature: -18°C

7.3 Specific end use(s) The product intended solely for the application stated in the product description. (See section 1.2)

## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

8.2.1 Additional information about design of technical systems: Skin protection: No further data. See item 7.

8.1.0 Components with critical values that require monitoring at the workplace

#### 8.1.1 DNELs:

The values given for the "Derived No-Effect Level" are calculated individual values. A combined effect of the substances was not considered.

CAS No.	Designation of material
CAS: 7085-85-0	Ethyl 2-cyanoacrylate
Inhalative	DNEL 9.25 mg/m <sup>3</sup> (Consumer)

8.1.2 Workplace exposure limits: (Workplace exposure limits) / (EU 2004/34)

CAS No.	Designation of material	Type	Value	Unit
CAS: 7085-85-0	Ethyl 2-cyanoacrylate			
WEL	Short-term value:	1.5 mg/m <sup>3</sup> , 0.3 ppm		

8.1.3 Additional Occupational Exposure Limit Values for possible hazards during processing:

At the contemplated processing there are no further exposure limits to be observed.


8.1.5 Additional informations: The applicable national list was used as the basis for the preparation and / or revision of this safety data sheet.

### 8.2 Limitation and monitoring of exposure


#### 8.2.2 Personal protective equipment:


The use of protective equipment may be required for commercial use of the product. Type and extent depend on the workplace.

##### 8.2.2.1 General protective and hygienic measures:


 Use skin protection cream for preventive skin protection.

Avoid contact with the eyes and skin.

 Do not eat, drink, smoke or take snuff while working.

 Wash hands during breaks and at the end of the work.

##### 8.2.2.2 Breathing equipment:

 If the room is well ventilated, no respiratory protection is necessary.

In the event of insufficient ventilation, respiratory protection is required.


- Recommended filter device for short term use [1 - 30 Min]: Respiratory protection half mask

- Recommended filter device for commercial use [>30 Min]:

Observe wearing time limitation of the manufacturer.

Full face respirator

##### 8.2.2.3 Protection of hands:

 Protective gloves.

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

Check protective gloves prior to each use for their proper condition.


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

##### - Material of gloves:

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

##### - Penetration time of glove material:

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

 The use of waterproof gloves with little protection against chemicals is recommended.

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- For the permanent contact in work areas without heightened risk of injury (e.g. Laboratory) gloves made of the following material are suitable:

0,1 - 0,2 mm; 30 - 120 min.  
Butyl rubber  
Fluorocarbon rubber (Viton)  
Nitrile rubber, NBR

- For the permanent contact gloves made of the following materials are suitable:

0,3 - 0,8 mm; 120 - 240 min.  
Rubber gloves  
Plastic gloves  
Butyl rubber  
Fluorocarbon rubber (Viton)  
Nitrile rubber, NBR  
Chloroprene rubber, CR  
Neoprene gloves.

- Not suitable are gloves made of the following materials:



Rubber gloves  
Leather gloves  
Fabric gloves

8.2.2.4 Eye/face protection:



Safety glasses

8.2.2.5 Body protection:



Protective work clothing

Impervious protective clothing

8.2.2.6 Protective shoes: -

8.3 Limitation and supervision of exposure into the environment At this point no data are available.

8.4 Risk management measures

There are no measures established for the risk management of ingredients according to Article 32 of Regulation (EC) No 1907/2006.

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

The following physical data are subject to normal fluctuations of raw materials and in the production.  
[Lit <sup>1</sup> = Literature value]

#### 9.1.1 General Informations

Form:  
Colour :  
Smell :  
Important information on protection of health and environment, and on safety:  
pH-value:

Liquid  
Colourless  
Characteristic

No further information available.  
Mixture reacts violently with water.

#### Change in conditions

Melting point / Melting range :  
Boiling point / Boiling range :  
Flashpoint :  
Fire behavior :

-31 °C (DIN ISO 3016)  
214 °C (±2% DIN EN ISO 3924, CAS: 7085-85-0 Ethyl 2-cyanoacrylate)  
87 °C (EN ISO 13736)

#### Ignition temperature:

Auto-ignition temperature :  
Explosive properties:  
Critical values for explosion :  
Lower limit :  
Upper limit :

The product doesn't support combustion.  
The product contains ingredients which may form flammable gases or vapors.  
480 °C (DIN EN 14 522, CAS: 7085-85-0 Ethyl 2-cyanoacrylate)

The product is not self igniting.  
Product is not explosive.  
[Highest / lowest value of individual components]  
Not determined.  
Not determined.

Oxidizing properties:  
Vapor pressure at 20 °C:

The product has no oxidizing properties.  
0.2 hPa (Lit <sup>1</sup>)

Density at 20 °C:

[Value is calculated]  
1.051 – 1.052 g/cm<sup>3</sup> (±5% DIN EN ISO 3675)

Bulk density:

Not applicable.

Solubility / Miscibility

Water:

Fully miscible.  
Polymerizes on contact with water.

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Viscosity:  
Dynamic at 20 °C: 60 – 180 mPas (±10% DIN 51562)

**9.2 Other informations:**

VOC (EG 2004/42): 0.0 g/l

**SECTION 10: Stability and reactivity**

**10.1 Reactivity**

 The product reacts chemically with substances, listed in chapter 10.3.

**10.2 Chemical stability** The product is in compliance with the storage and processing conditions, chemically stable.  
**Thermal decomposition / conditions to be avoided:** No decomposition when properly applied and stored.

**10.3 Possibility of hazardous reactions**

Polymerization with evolution of heat.  
Reacts with moist air.

**10.4 Conditions to avoid** See section 7.2

**10.5 Incompatible materials** Amines, alcohols, water.

**10.6 Hazardous decomposition products** If handled and stored properly dangerous products of decomposition are not to be expected.

**10.7 Additional informations**

There is no risk of decomposition or uncontrolled chemical reaction when the specified application conditions are complied with.

**SECTION 11: Toxicological information**

**11.1 Information on toxicological effects**

If the substance or the mixture is not classified for a particular hazard, the following notice will be given in the safety data sheet: "Based on available data the classification criteria are not met."

**11.1.1 Acute toxicity:** Based on available data, the classification criteria are not met.

**LD/LC50 values that are relevant for classification:**

With this product no toxicological studies were performed on living organisms. The following data are literature values of individual ingredients that have no claim to completeness.

(\*BW = body weight)

CAS	Name	Type	Value (Species)
<b>CAS: 7085-85-0 Ethyl 2-cyanoacrylate</b>			
Oral	LD 50	> 5,000 mg/kg BW (rat) (OECD 432 - Acute Oral toxicity - Acute Toxic Class)	
Dermal	LD 50	> 2,000 mg/kg BW (Rabbit) (OECD 402 - Acute Dermal Toxicity)	
<b>CAS: 9011-14-7 2-Propenoic acid, 2-methyl-, methyl ester, homopolymer</b>			
Oral	LD 50	> 5,000 mg/kg BW (rat) (OECD 401 - Acute Oral Toxicity)	

**11.1.2 Specific symptoms in biological assay .**

- **Skin corrosion / irritation:**

**CAS: 7085-85-0 Ethyl 2-cyanoacrylate**

Irritation of skin | PDII (Primary Dermal Irritation Index) | 0.87 - (Rabbit) (OECD 404 - Acute Dermal Irritation / Corrosion)

- **Serious eye damage / irritation:**

**CAS: 7085-85-0 Ethyl 2-cyanoacrylate**

Irritation of eyes | OEIS (Overall Eye Irritation Score) | 10 – 29 - (Rabbit) (OECD 405 - Acute Eye Irritation / Corrosion)

- **Respiratory or skin sensitisation:** Based on available data, the classification criteria are not met.

**11.1.3 Subacute to chronic toxicity**

**Examinations:** There are no data available.

- **Additional toxicological informations:**

The polymerized product has no toxicologically relevant characteristics.

Repeated or prolonged skin contact may cause defatting of the skin and cause dermatitis. The skin can become sensitive to other substances.

- **Repeated dose toxicity:** We have no further toxicological data on this point.

- **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction):** The product contains no CMR-substances.

CAS No.	Designation	%
CAS: 119-47-1	6,6'-di-tert-butyl-2,2'-methylenedi-p-cresol	0.01 – 0.1%

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- Germ cell mutagenicity: Based on available data, the classification criteria are not met.
- Carcinogenicity: Based on available data, the classification criteria are not met.
- Reproductive toxicity: Based on available data, the classification criteria are not met.
- STOT-single exposure:  
May cause respiratory irritation.
- STOT-repeated exposure: Based on available data, the classification criteria are not met.
- Aspiration hazard: Based on available data, the classification criteria are not met.

## SECTION 12: Ecological information

### 12.1 Toxicity

Aquatic toxicity: The product has not been tested for aquatic toxicity.

### 12.2 Persistence and degradability

Elimination degree:

CAS: 7085-85-0 Ethyl 2-cyanoacrylate

Biodegradability (28d) 98 % (OECD 301 - Ready Biodegradability)

Other information: The product is biodegradable.

### 12.3 Behaviour in environmental systems

Bioaccumulative potential: No further relevant information available.

12.4 Mobility in soil: No further relevant information available.

#### 12.7.1 Ecotoxicological effects .

Remarks: No data available.

#### 12.7.2 Behaviour in sewage processing plants

Remarks: The product does not impair the operation of a sewage plant.

Other informations: None.

#### 12.7.3 Additional ecological informations

COD-value: No data available.

According to recipe contains the following heavy metals and compounds according to EC guideline NO. 2006/11 EC:  
The product does not contain listed substances.

General notes: At present there are no ecotoxicological assessments.

12.5 Results of PBT and vPvB assessment No effects.

12.6 Other adverse effects: No further relevant information available.

## SECTION 13: Disposal considerations

### 13.1 Waste treatment methods

Recommendation: -

13.1.1 Waste disposal key number Allocation of a waste code number is to be carried out in consultation with the regional waste disposal company.

#### 13.1.2 Uncleaned packaging

Recommendation:

Empty container completely.

Not contaminated packaging can be used for recycling.

Disposal must be made according to official regulations.

Empty contaminated packagings thoroughly. They can be recycled after thorough and proper cleaning.

13.1.3 Cleaned / completely emptied packaging



Packaging which does not exhibit any harmful adhering products (e.g. cured or cleaned) can be sent for reprocessing.

## SECTION 14: Transport information

### 14.1 UN-Number

IMDG, IATA

Void

### 14.2 UN proper shipping name

ADR/RID/ADN, IMDG, IATA

Void

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<b>14.3 Transport hazard class(es):</b> ADR/RID/ADN, IMDG, IATA Class	Void
<b>14.4 Packing group:</b> ADR/RID/ADN, IMDG, IATA	Void
<b>14.5 Environmental hazards:</b>	Not applicable.
<b>14.6 Special precautions for user:</b>	Not applicable.
<b>14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code:</b>	Not applicable.
<b>14.8 Transport / Additional information:</b> ADR/RID/ADN Packaging and special regulation:	No dangerous good according to the upper transport-regulations. None.
<b>IMDG</b> Remarks:	None.
<b>IATA</b> Comments:	>500 ml UN3334, PI906; ≤500 ml unrestricted
<b>14.10 DG-EA-Code (HAZCHEM-Code):</b>	-

## SECTION 15: Regulatory information

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

#### 15.1.1 EU regulations

The product contains no substances according to (EC) No. 1005/2009, which deplete the ozone layer.  
The product contains no organic substances according to (EC) No. 850/2004, which are persistent.  
The product does not contain any dangerous substances according to (EC) No. 649/2012 ("PIC") with import or export regulation.

**15.1.2 Directive 2012/18/EU (Seveso-III directive)** The product and its ingredients are not subject to the EU-directive.

**15.1.3 List of substances subject to authorization according to Regulation (EC) No. 1907/2006 Annex XIV:** None of the ingredients is listed.

**15.1.4 Regulation (EC) No 1907/2006 Annex XVII:** None of the ingredients is listed.

**15.1.5 Regulation (EU) No. 649/2012 on the export and import of dangerous chemicals (PIC):**

CAS no.	Designation	Appendix
None of the ingredients are listed.		

**15.1.6 Regulation (EU) 2019/1021 on persistent organic pollutants (POPs):**

CAS no.	Designation	Appendix
None of the ingredients are listed.		

**15.1.7 List of Substances subject to approval (Annex XIV):**

None of the ingredients are listed.
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**15.1.9.1 Annex I - RESTRICTED EXPLOSIVES PRECURSORS (Upper limit value for the purpose of licensing under Article 5(3))**

None of the ingredients are listed.
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**15.1.9.2 Annex II - REPORTABLE EXPLOSIVES PRECURSORS**

None of the ingredients are listed.
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**15.1.10 Regulation (EC) No 273/2004 on drug precursors:**

None of the ingredients are listed.
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**15.1.11 Regulation (EC) No 111/2005 laying down rules for the monitoring of trade between the Community and third countries in drug precursors**

None of the ingredients are listed.
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### 15.2 National regulations - Great Britain:

In principle, the national regulations are to be determined and observed by the user of the product on their own responsibility.  
Apart from the following regulations, we are not aware of any legal regulations.

**CE** This product is approved as a medical device.

**List of substances subject to authorisation (UK ANNEX XIV)**

None of the ingredients are listed.
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**Substances of very high concern (SVHC) according to UK REACH**

None of the ingredients are listed.

**15.4 Chemical safety assessment**

For the mixture a chemical safety assessment has not been performed.  
Chemical Safety Assessments are available for ingredients with an ECHA-registration.

**SECTION 16: Other information**

The above details are based on the latest state of our knowledge. Processing notes for this product are listed in a technical data sheet. Existing laws, decrees and regulations, even those which are not stated in this data sheet are to be complied by the recipient of our products at his own responsibility.

© This MSDS is for information within the suppliers chain; it is copyrighted. A transfer to third parties outside the supply to non-official purposes or publication, even in part, requires the prior written consent of the manufacturer.

The safety data sheet also contains personal data whose use, publication and disclosure is prohibited.

Safety data sheets serve to pass on information within the supply chain according to UK REACH. Private end users are not part of this supply chain and therefore have no legal right to a product safety data sheet.

The classification of the product was carried out according to the criteria of Annex I (EC) 1272/2008.

**Reasons for changes:**

Updating of data.

In the revision of the MSDS the labeling was created in accordance to the current rules of the EC-GB CLP, with data from the database of registered substances and the actual C&L-Inventory of the ECHA.

**Training hints:**



Please read the consumer information.

**Material Safety Data Sheet issued by:**

Engineering office J. Petry  
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D-35510 Butzbach

+49 - 6033-974 637 5

(info@sifa-ing-petry.de)

www.sifa-ing-petry.de

**Note:**

The informations about ingredients given in this data sheet are basing on the informations of our suppliers of raw materials. Despite careful handling, the completeness and correctness of these data can not be guaranteed. This is especially true for substances below their declaration limit and for substances without classification or without attribution to a CAS number.

Physical data were identified by the manufacturer of this product. They represent no assurance of product characteristics and establishes no legal contractual relationship.

**Abbreviations and acronyms:**

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

ICAO: International Civil Aviation Organisation

IOELV: Indicative Occupational Exposure Limit Value (EU)

ECHA: European Chemicals Agency

ATE: Acute Toxicity Estimates

CMR: Carc., Muta., Repr.

ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

DNEL: Derived No-Effect Level (UK REACH)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Skin Irrit. 2: Skin corrosion/irritation – Category 2

Eye Irrit. 2: Serious eye damage/eye irritation – Category 2

STOT SE 3: Specific target organ toxicity (single exposure) – Category 3

**Sources:**

- (EG) Nr. 1272/2008 (GB CLP, EU-GHS)

- (EG) Nr. 2020/878 (UK REACH Annex II - MSDS)

[\*] Those chapters marked with (\*) were changed to the previous version of this MSDS.