

## EFFISUS BONDING KF PRO

### SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING


- 1.1 Product identifier:** EFFISUS BONDING KF PRO  
**Other means of identification:**  
 Not relevant
- 1.2 Relevant identified uses of the substance or mixture and uses advised against:**  
 Relevant uses (Professional users): Adhesive/Sealant.  
 Relevant uses (Industrial user): Adhesive/Sealant.  
 Uses advised against: All uses not specified in this section or in section 7.3
- 1.3 Details of the supplier of the safety data sheet:**  
 Effisus, Unipessoal Lda  
 Travessa José de Oliveira Mendes, 87 & 103  
 4760-912 Vila Nova de Famalicão - Porto - Portugal  
 Phone: +351 252085574 - Fax: +351252081644  
 geral@effisus.com  
 www.effisus.com
- 1.4 Emergency telephone number:**

### SECTION 2: HAZARDS IDENTIFICATION

- 2.1 Classification of the substance or mixture:**  
**CLP Regulation (EC) No 1272/2008:**  
 The product is not classified as hazardous according to CLP Regulation (EC) No 1272/2008.
- 2.2 Label elements:**  
**CLP Regulation (EC) No 1272/2008:**  
**Hazard statements:**  
 Not relevant  
**Precautionary statements:**  
 Not relevant  
**Supplementary information:**  
 EUH208: Contains N-(3-(trimethoxysilyl)propyl)ethylenediamine, Trimethoxyvinylsilane. May produce an allergic reaction.  
 EUH210: Safety data sheet available on request.
- 2.3 Other hazards:**  
 Product does not meet PBT/vPvB criteria  
 Endocrine-disrupting properties: The product does not meet the criteria.

### SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

- 3.1 Substance:**  
 Not relevant
- 3.2 Mixture:**  
**Chemical description:** Mixture composed of polymers in solvent  
**Components:**  
 In accordance with Annex II of Regulation (EC) No 1907/2006 (point 3), the product contains:


Identification	Chemical name/Classification	Concentration
CAS: 1760-24-3 EC: 217-164-6 Index: Not relevant REACH: 01-2119970215-39-XXXX	<b>N-(3-(trimethoxysilyl)propyl)ethylenediamine<sup>(1)</sup></b>  Regulation 1272/2008 Eye Dam. 1: H318; Skin Sens. 1B: H317; STOT SE 3: H335 - Danger	Self-classified   <b>0.1 - &lt;1%</b>

<sup>(1)</sup> Substances presenting a health or environmental hazard which meet criteria laid down in Regulation (EU) No. 2020/878

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## EFFISUS BONDING KF PRO

### SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS (continued)

Identification	Chemical name/Classification	Concentration
CAS: 2768-02-7 EC: 220-449-8 Index: Not relevant REACH: 01-2119513215-52-XXXX	<b>Trimethoxyvinylsilane<sup>(1)</sup></b>  Regulation 1272/2008 Acute Tox. 4: H332; Flam. Liq. 3: H226; Skin Sens. 1B: H317 - Warning	Self-classified   <b>0.1 - &lt;1%</b>

<sup>(1)</sup> Substances presenting a health or environmental hazard which meet criteria laid down in Regulation (EU) No. 2020/878

To obtain more information on the hazards of the substances consult sections 11, 12 and 16.

### SECTION 4: FIRST AID MEASURES

#### 4.1 Description of first aid measures:

The symptoms resulting from intoxication can appear after exposure, therefore, in case of doubt, seek medical attention for direct exposure to the chemical product or persistent discomfort, showing the SDS of this product.

##### By inhalation:

This product is not classified as hazardous through inhalation. However, in case of intoxication symptoms it is recommended to remove the person affected from the area of exposure, provide clean air and keep at rest. Request medical attention if symptoms persist.

##### By skin contact:

This product is not classified as hazardous when in contact with the skin. However, in case of skin contact it is recommended to remove contaminated clothes and shoes, rinse the skin or if necessary shower the affected person thoroughly with cold water and neutral soap. In case of serious reaction consult a doctor.

##### By eye contact:

Rinse eyes thoroughly with water for at least 15 minutes. If the injured person uses contact lenses, these should be removed unless they are stuck to the eyes, in which case removal could cause further damage. In all cases, after cleaning, a doctor should be consulted as quickly as possible with the SDS for the product.

##### By ingestion/aspiration:

In case of consumption, seek immediate medical assistance showing the SDS for the product.

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

Acute and delayed effects are indicated in sections 2 and 11.

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

Not relevant

### SECTION 5: FIREFIGHTING MEASURES

#### 5.1 Extinguishing media:

##### Suitable extinguishing media:

Product is non-flammable under normal conditions of storage, handling and use. In the case of combustion as a result of improper handling, storage or use preferably use fire extinguishing methods suitable to surrounding conditions, in accordance with the Regulation on fire protection systems.

##### Unsuitable extinguishing media:

Not relevant

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

As a result of combustion or thermal decomposition reactive sub-products are created that can become highly toxic and, consequently, can present a serious health risk.

#### 5.3 Advice for firefighters:

Depending on the magnitude of the fire it may be necessary to use full protective clothing and Self Contained Breathing Apparatus. Minimum emergency facilities and equipment should be available (fire blankets, portable first aid kit,...)

##### Additional provisions:

Act in accordance with the Internal Emergency Plan and the Information Sheets on actions to take after an accident or other emergencies. Eliminate all sources of ignition. In case of fire, cool the storage containers and tanks for products susceptible to combustion, explosion or BLEVE as a result of high temperatures. Avoid spillage of the products used to extinguish the fire into an aqueous medium.

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## SECTION 6: ACCIDENTAL RELEASE MEASURES

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

**For non-emergency personnel:**

Sweep up and shovel product or collect by other means and place in container for reuse (preferred) or disposal

**For emergency responders:**

Wear protective equipment. Keep unprotected persons away. See section 8.

### **6.2 Environmental precautions:**

This product is not classified as hazardous to the environment. Keep product away from drains, surface and ground water.

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

It is recommended:

Sweep up and shovel product or collect by other means and place in container for reuse (preferred) or disposal

### **6.4 Reference to other sections:**

See sections 8 and 13.

## SECTION 7: HANDLING AND STORAGE

### **7.1 Precautions for safe handling:**

A.- General precautions for safe use

Comply with the current legislation concerning the prevention of industrial risks with regards manually handling weights. Maintain order, cleanliness and dispose of using safe methods (section 6).

B.- Technical recommendations for the prevention of fires and explosions

Avoid the evaporation of the product as it contains flammable substances, which could form flammable vapour/air mixtures in the presence of sources of ignition. Control sources of ignition (mobile phones, sparks,...) and transfer at slow speeds to avoid the creation of electrostatic charges. Consult section 10 for conditions and materials that should be avoided.

C.- Technical recommendations on general occupational hygiene

Do not eat or drink during the process, washing hands afterwards with suitable cleaning products.

D.- Technical recommendations to prevent environmental risks

It is recommended to have absorbent material available at close proximity to the product (See subsection 6.3)

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

A.- Specific storage requirements

Store in a cool, dry, well-ventilated location

B.- General conditions for storage

Avoid sources of heat, radiation, static electricity and contact with food. For additional information see subsection 10.5

### **7.3 Specific end use(s):**

Except for the instructions already specified it is not necessary to provide any special recommendation regarding the uses of this product.

## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

### **8.1 Control parameters:**

Substances whose occupational exposure limits have to be monitored in the workplace (European OEL, not country-specific legislation):

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

**DNEL (Workers):**

Not relevant

**DNEL (General population):**

Not relevant

**PNEC:**

Not relevant

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### SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)

#### 8.2 Exposure controls:



A.- Individual protection measures, such as personal protective equipment

As a preventative measure it is recommended to use basic Personal Protective Equipment, with the corresponding <<CE marking>> in accordance with Regulation (EU) 2016/425. For more information on Personal Protective Equipment (storage, use, cleaning, maintenance, class of protection,...) consult the information leaflet provided by the manufacturer. For more information see subsection 7.1. All information contained herein is a recommendation which needs some specification from the labour risk prevention services as it is not known whether the company has additional measures at its disposal.

B.- Respiratory protection


Not required. If the working conditions and/or safety measures adopted do not allow keeping the airborne concentration of the product below the exposure limits (if any) or at acceptable levels (if no exposure limits exist), suitable respiratory protection equipment chosen by a qualified professional should be used.

C.- Specific protection for the hands

Pictogram	PPE	Labelling	CEN Standard	Remarks
 Mandatory hand protection	Chemical protective gloves (Glove material: Nitrile rubber (NBR), Butyl rubber (BR), Minimum layer thickness: 0.5 mm, Penetration time: 480 min)		EN ISO 374 EN ISO 21420:2020	Replace the gloves at any sign of deterioration.

A maximum wearing time corresponding to 50 % of the breakthrough time is recommended. 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 mixture of several substances, the resistance of the glove material can not be calculated in advance with total reliability and has therefore to be checked prior to the application.

D.- Eye and face protection

Pictogram	PPE	Labelling	CEN Standard	Remarks
 Mandatory face protection	Tightly sealed goggles		EN 166:2002 EN ISO 4007:2018	Clean daily and disinfect periodically according to the manufacturer's instructions. Use if there is a risk of splashing.

E.- Body protection

Not relevant

F.- Additional emergency measures

It is advised to implement additional emergency equipments in workplaces that are particularly exposed to the product or in situations where risk assessments highlight the necessity of such equipments.

Emergency measure	Standards	Emergency measure	Standards
 Emergency shower	ANSI Z358-1 ISO 3864-1:2011, ISO 3864-4:2011	 Eyewash stations	DIN 12 899 ISO 3864-1:2011, ISO 3864-4:2011

#### Environmental exposure controls:

To comply with environmental protection regulations, it is recommended to prevent any spillage of the product and its container. For more detailed information, please refer to subsection 7.1.D.

### SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

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

For complete information see the product datasheet.

##### Appearance:

Physical state at 20 °C:	Solid
Appearance:	Paste
Colour:	Black
Odour:	Characteristic
Odour threshold:	Not relevant *

##### Volatility:

Boiling point at atmospheric pressure:	Not relevant *
Vapour pressure at 20 °C:	Not relevant *
Vapour pressure at 50 °C:	Not relevant *
Evaporation rate at 20 °C:	Not relevant *

##### Product description:

Density at 20 °C:	1,6 g/cm <sup>3</sup>
Relative density at 20 °C:	Not relevant *
Dynamic viscosity at 20 °C:	Not relevant *
Kinematic viscosity at 20 °C:	Not relevant *
Kinematic viscosity at 40 °C:	Not relevant *
Concentration:	Not relevant *
pH:	Not relevant *
Vapour density at 20 °C:	Not relevant *
Partition coefficient n-octanol/water 20 °C:	Not relevant *
Solubility in water at 20 °C:	Not relevant *
Solubility properties:	Insoluble in water
Decomposition temperature:	Not relevant *
Melting point/freezing point:	Not relevant *

##### Flammability:

Flash Point:	Not relevant *
Flammability (solid, gas):	Not relevant *
Autoignition temperature:	Product is not selfigniting.
Lower flammability limit:	Not relevant *
Upper flammability limit:	Not relevant *

##### Explosive (Solid):

Lower explosive limit:	Not relevant *
Upper explosive limit:	Not relevant *

##### Particle characteristics:

Median equivalent diameter:	Not relevant *
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#### 9.2 Other information:

##### Information with regard to physical hazard classes:

Explosive properties:	Product does not present an explosion hazard.
Oxidising properties:	Not relevant *
Corrosive to metals:	Not relevant *
Heat of combustion:	Not relevant *
Aerosols-total percentage (by mass) of flammable components:	Not relevant *

##### Other safety characteristics:

Surface tension at 20 °C:	Not relevant *
Refraction index:	Not relevant *

\*Not relevant due to the nature of the product, not providing information property of its hazards.

## SECTION 10: STABILITY AND REACTIVITY

### 10.1 Reactivity:

No hazardous reactions are expected because the product is stable under recommended storage conditions. See section 7 from Safety Data Sheet.

### 10.2 Chemical stability:

Chemically stable under the indicated conditions of storage, handling and use.

### 10.3 Possibility of hazardous reactions:

Under the specified conditions, hazardous reactions that lead to excessive temperatures or pressure are not expected.

### 10.4 Conditions to avoid:

No further relevant information available.

### 10.5 Incompatible materials:

No further relevant information available.

### 10.6 Hazardous decomposition products:

No dangerous decomposition products known.

## SECTION 11: TOXICOLOGICAL INFORMATION

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

The experimental information related to the toxicological properties of the product itself is not available

#### Dangerous health implications:

In case of exposure that is repetitive, prolonged or at concentrations higher than the recommended occupational exposure limits, adverse effects on health may result, depending on the means of exposure:

#### A- Ingestion (acute effect):

- Acute toxicity: Based on available data, the classification criteria are not met, as it does not contain substance classified as hazardous for consumption. For more information see section 3
- Corrosivity/Irritability: Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for this effect. For more information see section 3.

#### B- Inhalation (acute effect):

- Acute toxicity : Based on available data, the classification criteria are not met. However, it contains substance classified as hazardous for inhalation. For more information see section 3.
- Corrosivity/Irritability: Based on available data, the classification criteria are not met. However, it contains substances classified as hazardous for inhalation. For more information see section 3.

#### C- Contact with the skin and the eyes (acute effect):

- Contact with the skin: Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for skin contact. For more information see section 3.
- Contact with the eyes: Based on available data, the classification criteria are not met. However, it does contain substances classified as hazardous for this effect. For more information see section 3.

#### D- CMR effects (carcinogenicity, mutagenicity and toxicity to reproduction):

- Carcinogenicity: Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for the effects mentioned. For more information see section 3.

IARC: Not relevant

- Mutagenicity: Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for this effect. For more information see section 3.
- Reproductive toxicity: Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for this effect. For more information see section 3.

#### E- Sensitizing effects:

- Respiratory: Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous with sensitising effects. For more information see section 3.
- Skin: Based on available data, the classification criteria are not met. However, it contains substances classified as dangerous with sensitising effects. For more information see section 3.

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### SECTION 11: TOXICOLOGICAL INFORMATION (continued)

**F-** Specific target organ toxicity (STOT) - single exposure:

Based on available data, the classification criteria are not met. However, it contains substances classified as hazardous for inhalation. For more information see section 3.

**G-** Specific target organ toxicity (STOT)-repeated exposure:

- Specific target organ toxicity (STOT)-repeated exposure: Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for this effect. For more information see section 3.
- Skin: Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for this effect. For more information see section 3.

**H-** Aspiration hazard:

Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for this effect. For more information see section 3.

**Other information:**

Not relevant

**Specific toxicology information on the substances:**

Identification	Acute toxicity		Genus
N-(3-(trimethoxysilyl)propyl)ethylenediamine CAS: 1760-24-3 EC: 217-164-6	LD50 oral	2995 mg/kg	Rat
	LD50 dermal	>2000 mg/kg	Rat
	LC50 inhalation		
Trimethoxyvinylsilane CAS: 2768-02-7 EC: 220-449-8	LD50 oral	6819 mg/kg	Rat
	LD50 dermal	3158 mg/kg	Rabbit
	LC50 inhalation		

**11.2 Information on other hazards:**

**Endocrine disrupting properties**

Endocrine-disrupting properties: The product does not meet the criteria.

**Other information**

Not relevant

### SECTION 12: ECOLOGICAL INFORMATION

The experimental information related to the eco-toxicological properties of the product itself is not available

Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for this effect. For more information see section 3.

**12.1 Toxicity:**

**Acute toxicity:**

No further relevant information available

**12.2 Persistence and degradability:**

No further relevant information available

**12.3 Bioaccumulative potential:**

No further relevant information available

**12.4 Mobility in soil:**

No further relevant information available

Insoluble in water.

**12.5 Results of PBT and vPvB assessment:**

Product does not meet PBT/vPvB criteria.

**12.6 Endocrine disrupting properties:**

Endocrine-disrupting properties: The product does not meet the criteria.

**12.7 Other adverse effects:**

Not described.

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**SECTION 13: DISPOSAL CONSIDERATIONS**

**13.1 Waste treatment methods:**

Code	Description	Waste class (Regulation (EU) No 1357/2014)
	It is not possible to assign a specific code, as this depends on the use given by the user.	Non-hazardous

**Type of waste (Regulation (EU) No 1357/2014):**

Not relevante

**Waste management (disposal and evaluation):**

Consult the authorized waste service manager on the assessment and disposal operations in accordance with Annex 1 and Annex 2 (Directive 2008/98/EC). As under 15 01 (2014/955/EC) of the code and in case the container has been in direct contact with the product, it will be processed the same way as the actual product. Otherwise, it will be processed as non-hazardous residue. Waste should not be disposed of to drains. See paragraph 6.2.

**Regulations related to waste management:**

In accordance with Annex II of Regulation (EC) No 1907/2006 (REACH) the community or state provisions related to waste management are stated

Community legislation: Directive 2008/98/EC, 2014/955/EU, Regulation (EU) No 1357/2014

**SECTION 14: TRANSPORT INFORMATION**

**Transport of dangerous goods by land:**

With regard to ADR and RID:

- 14.1 UN number or ID number:** Not relevant
- 14.2 UN proper shipping name:** Not relevant
- 14.3 Transport hazard class(es):** Not relevant
- Labels: Not relevant
- 14.4 Packing group:** Not relevant
- 14.5 Environmental hazards:** No
- 14.6 Special precautions for user**
- Special regulations: Not relevant
- Tunnel restriction code: Not relevant
- Physico-Chemical properties: see section 9
- Limited quantities: Not relevant
- 14.7 Maritime transport in bulk according to IMO instruments:** Not relevant

**Transport of dangerous goods by sea:**

With regard to IMDG:

- 14.1 UN number or ID number:** Not relevant
- 14.2 UN proper shipping name:** Not relevant
- 14.3 Transport hazard class(es):** Not relevant
- Labels: Not relevant
- 14.4 Packing group:** Not relevant
- 14.5 Marine pollutant:** No
- 14.6 Special precautions for user**
- Special regulations: Not relevant
- EmS Codes:
- Physico-Chemical properties: see section 9
- Limited quantities: Not relevant
- Segregation group: Not relevant
- 14.7 Maritime transport in bulk according to IMO instruments:** Not relevant

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**SECTION 14: TRANSPORT INFORMATION (continued)**

**Transport of dangerous goods by air:**

With regard to IATA/ICAO:

- 14.1 UN number or ID number:** Not relevant
- 14.2 UN proper shipping name:** Not relevant
- 14.3 Transport hazard class(es):** Not relevant
- Labels: Not relevant
- 14.4 Packing group:** Not relevant
- 14.5 Environmental hazards:** No
- 14.6 Special precautions for user**
- Physico-Chemical properties: see section 9
- 14.7 Maritime transport in bulk according to IMO instruments:** Not relevant

**SECTION 15: REGULATORY INFORMATION**

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

- **Article 95**, REGULATION (EU) No 528/2012: Not relevant
- Candidate substances for authorisation under the **Regulation (EC) No 1907/2006** (REACH): Not relevant
- **Regulation (EU) 2019/1021** on persistent organic pollutants: Not relevant
- **Regulation (EU) No 2024/590**, about substances that deplete the ozone layer: Not relevant
- **Regulation (EU) No 649/2012**, in relation to the import and export of hazardous chemical products: Not relevant
- Substances included in **Annex XIV** of REACH ("Authorisation List") and sunset date: Not relevant
- Regulation (UE) 2019/1148, on the marketing and use of explosives precursors: Not relevant

**Seveso III:**

Not relevant

**Limitations to commercialisation and the use of certain dangerous substances and mixtures (Annex XVII REACH, etc....):**

Not relevant

**Specific provisions in terms of protecting people or the environment:**

It is recommended to use the information included in this safety data sheet as a basis for conducting workplace-specific risk assessments in order to establish the necessary risk prevention measures for the handling, use, storage and disposal of this product.

**Other legislation:**

The product could be affected by sectorial legislation.

**15.2 Chemical safety assessment:**

The supplier has not carried out evaluation of chemical safety.

**SECTION 16: OTHER INFORMATION**

**Legislation related to safety data sheets:**

The SDS shall be supplied in an official language of the country where the product is placed on the market. This safety data sheet has been designed in accordance with ANNEX II-Guide to the compilation of safety data sheets of Regulation (EC) No 1907/2006 (COMMISSION REGULATION (EU) 2020/878).

**Modifications related to the previous Safety Data Sheet which concerns the ways of managing risks.:**

Not relevant

**Texts of the legislative phrases mentioned in section 3:**

The phrases indicated do not refer to the product itself; they are present merely for informative purposes and refer to the individual components which appear in section 3

**CLP Regulation (EC) No 1272/2008:**

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**SECTION 16: OTHER INFORMATION (continued)**

Acute Tox. 4: H332 - Harmful if inhaled.  
 Eye Dam. 1: H318 - Causes serious eye damage.  
 Flam. Liq. 3: H226 - Flammable liquid and vapour.  
 Skin Sens. 1B: H317 - May cause an allergic skin reaction.  
 STOT SE 3: H335 - May cause respiratory irritation.

**Classification procedure:**

Not relevant

**Advice related to training:**

Training is recommended in order to prevent industrial risks for staff using this product and to facilitate their comprehension and interpretation of this safety data sheet, as well as the label on the product.

**Principal bibliographical sources:**

<http://echa.europa.eu>  
<http://eur-lex.europa.eu>

**Abbreviations and acronyms:**

ADR: European agreement concerning the international carriage of dangerous goods by road  
 IMDG: International maritime dangerous goods code  
 IATA: International Air Transport Association  
 ICAO: International Civil Aviation Organisation  
 COD: Chemical Oxygen Demand  
 BOD5: 5day biochemical oxygen demand  
 BCF: Bioconcentration factor  
 LD50: Lethal Dose 50  
 LC50: Lethal Concentration 50  
 EC50: Effective concentration 50  
 LogPOW: Octanolwater partition coefficient  
 Koc: Partition coefficient of organic carbon  
 UFI: unique formula identifier  
 IARC: International Agency for Research on Cancer

The information contained in this safety data sheet is based on sources, technical knowledge and current legislation at European and state level, without being able to guarantee its accuracy. This information cannot be considered a guarantee of the properties of the product, it is simply a description of the security requirements. The occupational methodology and conditions for users of this product are not within our awareness or control, and it is ultimately the responsibility of the user to take the necessary measures to obtain the legal requirements concerning the manipulation, storage, use and disposal of chemical products. The information on this safety data sheet only refers to this product, which should not be used for needs other than those specified.

- END OF SAFETY DATA SHEET -