Security data sheet



Product: 820

Manufacturer: PERMABOND ENGINEERING ADHESIVES

Product group: **KLEBSTOFF**

Article group: **CYANACRYLAT**

Download: 15.09.2025

PERMABOND 820

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Safety Data Sheet

According to Annex II to REACH - Regulation 2020/878 and to Annex II to UK REACH

SECTION 1. Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product name Permabond 820

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

Intended use Adhesive

1.3. Details of the supplier of the safety data sheet

Name Permabond Engineering Adhesives
Full address Niederkasseler Lohweg 18
District and Country 40547 Düsseldorf
Germany

Tel. +44 (0)1962 711 661

e-mail address of the competent person responsible for the Safety Data Sheet

info.europe@permabond.com

Supplier: Permabond Engineering Adhesives Ltd

Wessex Way, Colden Common,

Winchester, Hampshire SO21 1WP, UK

tel: +44 (0)1962 711 661

mail: info.europe@permabond.com

1.4. Emergency telephone number

For urgent inquiries refer to +44 (0)1962 711 661 (8.00 am-5.00 pm Mon-Fri)

CHEMTREC UK: +(44)-870-8200418
CHEMTREC Ireland: +(353)-19014670
CHEMTREC Australia: +(61)-290372994
CHEMTREC New Zealand: +(64)-98010034

SECTION 2. Hazards identification

2.1. Classification of the substance or mixture

The product is classified as hazardous pursuant to the provisions set forth in (EC) Regulation 1272/2008 (CLP) (and subsequent amendments and supplements). The product thus requires a safety datasheet that complies with the provisions of (EU) Regulation 2020/878.

Any additional information concerning the risks for health and/or the environment are given in sections 11 and 12 of this sheet.

Hazard classification and indication:

Eye irritation, category 2

Skin irritation, category 2

H319

Causes serious eye irritation.

Causes skin irritation.

Specific togget argon toggets a single expectage.

Specific target organ toxicity - single exposure, H335 May cause respiratory irritation.

category 3

2.2. Label elements

Hazard labelling pursuant to EC Regulation 1272/2008 (CLP) and subsequent amendments and supplements.

Hazard pictograms:





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SECTION 2. Hazards identification .../>>

Signal words: Warning

Hazard statements:

H319 Causes serious eye irritation.
H315 Causes skin irritation.
H335 May cause respiratory irritation.

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

Precautionary statements:

P280 Wear protective gloves / protective clothing / eye protection / face protection.
P302+P352 In case of contact with the skin: wash abundantly with soap and water.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to

do. Continue rinsing.

Contains: ethyl 2-cyanoacrylate

2.3. Other hazards

On the basis of available data, the product does not contain any PBT or vPvB in percentage ≥ than 0,1%.

The product does not contain substances with endocrine disrupting properties in concentration ≥ 0.1%.

SECTION 3. Composition/information on ingredients

3.2. Mixtures

Contains:

Identification x = Conc. % Classification (EC) 1272/2008 (CLP)

ALLYL 2-CYANOACRYLATE

INDEX $30 \le x < 60$ Eye Irrit. 2 H319, Skin Irrit. 2 H315

EC 230-796-7 CAS 7324-02-9

REACH Reg. 01-2120901336-63-XXXX

ethyl 2-cyanoacrylate

INDEX 607-236-00-9 30 ≤ x < 60 Eye Irrit. 2 H319, Skin Irrit. 2 H315, STOT SE 3 H335, EUH202

EC 230-391-5 STOT SE 3 H335: ≥ 10%

CAS 7085-85-0

REACH Reg. 01-2119527766-29-XXXX

The full wording of hazard (H) phrases is given in section 16 of the sheet.

SECTION 4. First aid measures

4.1. Description of first aid measures

Skin: contact with the product, the skin will stick to itself and to anything else

immediately. Do not try to remove the contaminated clothing in the product from the

skin, because the tight skin can easily tear. Wash the skin thoroughly with water and soap. Consult a doctor immediately.

Eyes: rinse immediately and abundantly with water. Continue to rinse for

at least 10 minutes. In case of gluing with sticker, do not forcefully separate the eyelids.

Apply a buffer soaked in hot water and allow the eyelids to separate.

Consult a doctor. The money adhesive does not follow the surfaces of the eyes but being

abrasive can cause damage. Consult a doctor immediately.

Ingestion: in contact the product can immediately glue the lips together. Do not cause the

He retched. Consult a doctor.

Inhalation: ventilation of the environment. Bring the subject to the open air, far from the accident site. In case of malaise consult a doctor.

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

Inhalation: nose irritation, throat and airways.

Ingestion: in contact the product can immediately glue the lips together. Skin: prolonged contact with the skin can cause redness and irritation.

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SECTION 4. First aid measures .../>>

Eyes: irritating and can cause redness and pain.

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

Notes for the doctor: in case of glued skin. Slowly separate the skin starting from the edge of the area glued. Help yourself with soap lukewarm water. In case of glued eyes. Do not force the opening of the eyelids. Apply a compress of hot water and let the eyes take they reopen alone.

SECTION 5. Firefighting measures

5.1. Extinguishing media

SUITABLE EXTINGUISHING EQUIPMENT

The extinguishing equipment should be of the conventional kind: carbon dioxide, foam, powder and water spray. UNSUITABLE EXTINGUISHING EQUIPMENT

None in particular.

5.2. Special hazards arising from the substance or mixture

HAZARDS CAUSED BY EXPOSURE IN THE EVENT OF FIRE Do not breathe combustion products.

5.3. Advice for firefighters

GENERAL INFORMATION

Use jets of water to cool the containers to prevent product decomposition and the development of substances potentially hazardous for health. Always wear full fire prevention gear. Collect extinguishing water to prevent it from draining into the sewer system. Dispose of contaminated water used for extinction and the remains of the fire according to applicable regulations.

SPECIAL PROTECTIVE EQUIPMENT FOR FIRE-FIGHTERS

Normal fire fighting clothing i.e. fire kit (BS EN 469), gloves (BS EN 659) and boots (HO specification A29 and A30) in combination with self-contained open circuit positive pressure compressed air breathing apparatus (BS EN 137).

SECTION 6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Block the leakage if there is no hazard.

Wear suitable protective equipment (including personal protective equipment referred to under Section 8 of the safety data sheet) to prevent any contamination of skin, eyes and personal clothing. These indications apply for both processing staff and those involved in emergency procedures.

6.2. Environmental precautions

The product must not penetrate into the sewer system or come into contact with surface water or ground water.

6.3. Methods and material for containment and cleaning up

Collect the leaked product into a suitable container. Evaluate the compatibility of the container to be used, by checking section 10. Absorb the remainder with inert absorbent material.

Make sure the leakage site is well aired. Contaminated material should be disposed of in compliance with the provisions set forth in point 13.

6.4. Reference to other sections

Any information on personal protection and disposal is given in sections 8 and 13.

SECTION 7. Handling and storage

7.1. Precautions for safe handling

Before handling the product, consult all the other sections of this material safety data sheet. Avoid leakage of the product into the environment. Do not eat, drink or smoke during use. Remove any contaminated clothes and personal protective equipment before entering places in which people eat.

7.2. Conditions for safe storage, including any incompatibilities

Store only in the original container. Store the containers sealed, in a well ventilated place, away from direct sunlight. Keep containers away



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SECTION 7. Handling and storage .../>>

from any incompatible materials, see section 10 for details.

7.3. Specific end use(s)

Information not available

SECTION 8. Exposure controls/personal protection

8.1. Control parameters

Regulatory References:

DNK ESP	Danmark España	Bekendtgørelse om grænseværdier for stoffer og materialer - BEK nr 1458 af 13/12/2019 Límites de exposición profesional para agentes químicos en España 2021
FIN	Suomi	HTP-VÄRDEN 2020. Koncentrationer som befunnits skadliga. SOCIAL - OCH HÄLSOVÅRDSMINISTERIETS PUBLIKATIONER 2020:25
POL	Polska	Rozporządzenie ministra rozwoju, pracy i technologii z dnia 18 lutego 2021 r. Zmieniające rozporządzenie w sprawie najwyższych dopuszczalnych stężeń i natężeń czynników szkodliwych dla zdrowia w środowisku pracy
SWE	Sverige	Hygieniska gränsvärden, Årbetsmiljöverkets föreskrifter och allmänna råd om hygieniska gränsvärden (AFS 2018:1)

				ethyl 2-c	yanoacrylat	e		
Threshold Limit	Value							
Type	Country	TWA/8h		STEL/15	min	Remarks / Observations	Remarks / Observations	
		mg/m3	ppm	mg/m3	ppm			
TLV	DNK	10	2	20	4			
VLA	ESP		0,2					
HTP	FIN	1	0,2					
NDS/NDSCh	POL	1		2				
NGV/KGV	SWE	10	2	20	4			
Health - Derived no-effect level - DNEL / DMEL								
Effects on consumers					Effects on workers			
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	Effects on consumers			Effects on workers				
Route of exposure	Acute	Acute	Chronic	Chronic	Acute	Acute	Chronic	Chronic
	local	systemic	local	systemic	local	systemic	local	systemic
Inhalation			9.25	9.25				
			mg/m3	mg/m3				

Legend:

 $(C) = CEILING \hspace*{0.2cm} ; \hspace*{0.2cm} INHAL = Inhalable \hspace*{0.2cm} Fraction \hspace*{0.2cm} ; \hspace*{0.2cm} RESP = Respirable \hspace*{0.2cm} Fraction \hspace*{0.2cm} ; \hspace*{0.2cm} THORA = Thoracic \hspace*{0.2cm} Fraction.$

VND = hazard identified but no DNEL/PNEC available ; NEA = no exposure expected ; NPI = no hazard identified ; LOW = low

hazard; MED = medium hazard; HIGH = high hazard.

8.2. Exposure controls

As the use of adequate technical equipment must always take priority over personal protective equipment, make sure that the workplace is well aired through effective local aspiration.

When choosing personal protective equipment, ask your chemical substance supplier for advice.

Personal protective equipment must be CE marked, showing that it complies with applicable standards.

Provide an emergency shower with face and eye wash station.

HAND PROTECTION

Protect hands with category III work gloves (see standard EN 374).

The following should be considered when choosing work glove material: compatibility, degradation, failure time and permeability.

The work gloves' resistance to chemical agents should be checked before use, as it can be unpredictable. The gloves' wear time depends on the duration and type of use.

SKIN PROTECTION

Wear category II professional long-sleeved overalls and safety footwear (see Regulation 2016/425 and standard EN ISO 20344). Wash body with soap and water after removing protective clothing.

EYE PROTECTION

Wear airtight protective goggles (see standard EN 166).

RESPIRATORY PROTECTION

If the threshold value (e.g. TLV-TWA) is exceeded for the substance or one of the substances present in the product, use a mask with a type A filter whose class (1, 2 or 3) must be chosen according to the limit of use concentration. (see standard EN 14387). In the presence of gases or vapours of various kinds and/or gases or vapours containing particulate (aerosol sprays, fumes, mists, etc.) combined filters are required

Respiratory protection devices must be used if the technical measures adopted are not suitable for restricting the worker's exposure to the threshold values considered. The protection provided by masks is in any case limited.

If the substance considered is odourless or its olfactory threshold is higher than the corresponding TLV-TWA and in the case of an emergency, wear open-circuit compressed air breathing apparatus (in compliance with standard EN 137) or external air-intake breathing



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SECTION 8. Exposure controls/personal protection/

apparatus (in compliance with standard EN 138). For a correct choice of respiratory protection device, see standard EN 529. ENVIRONMENTAL EXPOSURE CONTROLS

The emissions generated by manufacturing processes, including those generated by ventilation equipment, should be checked to ensure compliance with environmental standards.

SECTION 9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

Properties		Value	Information
Appearance		liquid	
Colour		colourless	
Odour		pungent	
Melting point / freezing point		not applicable	
Initial boiling point	>	100 °C	
Flammability		not available	
Lower explosive limit		not available	
Upper explosive limit		not available	
Flash point		83 °C	
Auto-ignition temperature		not available	
Decomposition temperature		not available	
рН		not available	Reason for missing data:substance/mixture is
			non-soluble (in water)
Kinematic viscosity		not available	
Dynamic viscosity		~ 95 mPa.s	Temperature: 23 °C
Solubility		not available	
Partition coefficient: n-octanol/water		not available	
Vapour pressure		0,6 mBar	Temperature: 25 °C
Density and/or relative density		1,1	
Relative vapour density		not available	

not applicable

9.2. Other information

Particle characteristics

9.2.1. Information with regard to physical hazard classes

Information not available

9.2.2. Other safety characteristics

Information not available

SECTION 10. Stability and reactivity

10.1. Reactivity

The product can react with water generating heat.

10.2. Chemical stability

Stable to normal environment temperatures if used as recommended.

10.3. Possibility of hazardous reactions

The reactions with the following materials can generate heat: alcohol water. Alkali. Amine.

10.4. Conditions to avoid

Do not add water directly to the product. It can cause a violent reaction.

10.5. Incompatible materials

Water, alcohol, amine.

10.6. Hazardous decomposition products

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Heating can generate the following products: Gas/Vapors/Toxic fumes of: Dioxide of carbon (CO2). Carbon monoxide (CO). Nitrosis gas (NOX). Hydrogen cyanide (HCN).

SECTION 11. Toxicological information

In the absence of experimental data for the product itself, health hazards are evaluated according to the properties of the substances it contains, using the criteria specified in the applicable regulation for classification.

It is therefore necessary to take into account the concentration of the individual hazardous substances indicated in section 3, to evaluate the toxicological effects of exposure to the product.

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

Metabolism, toxicokinetics, mechanism of action and other information

Information not available

Information on likely routes of exposure

Information not available

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Information not available

Interactive effects

Information not available

ACUTE TOXICITY

ATE (Inhalation) of the mixture:

ATE (Oral) of the mixture:

Not classified (no significant component)

Not classified (no significant component)

ATE (Dermal) of the mixture:

Not classified (no significant component)

ethyl 2-cyanoacrylate LD50 (Dermal): LD50 (Oral):

> 2000 mg/kg > 5000 mg/kg

SKIN CORROSION / IRRITATION

Causes skin irritation

SERIOUS EYE DAMAGE / IRRITATION

Causes serious eye irritation

RESPIRATORY OR SKIN SENSITISATION

Does not meet the classification criteria for this hazard class

GERM CELL MUTAGENICITY

Does not meet the classification criteria for this hazard class

CARCINOGENICITY

Does not meet the classification criteria for this hazard class

REPRODUCTIVE TOXICITY

Does not meet the classification criteria for this hazard class

STOT - SINGLE EXPOSURE

May cause respiratory irritation

STOT - REPEATED EXPOSURE





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SECTION 11. Toxicological information .../>>

Does not meet the classification criteria for this hazard class

ASPIRATION HAZARD

Does not meet the classification criteria for this hazard class

11.2. Information on other hazards

Based on the available data, the product does not contain substances listed in the main European lists of potential or suspected endocrine disruptors with human health effects under evaluation.

SECTION 12. Ecological information

Use this product according to good working practices. Avoid littering. Inform the competent authorities, should the product reach waterways or contaminate soil or vegetation.

12.1. Toxicity

Information not available

12.2. Persistence and degradability

Information not available

12.3. Bioaccumulative potential

Information not available

12.4. Mobility in soil

Information not available

12.5. Results of PBT and vPvB assessment

On the basis of available data, the product does not contain any PBT or vPvB in percentage ≥ than 0,1%.

12.6. Endocrine disrupting properties

Based on the available data, the product does not contain substances listed in the main European lists of potential or suspected endocrine disruptors with environmental effects under evaluation.

12.7. Other adverse effects

Information not available

SECTION 13. Disposal considerations

13.1. Waste treatment methods

Reuse, when possible. Product residues should be considered special hazardous waste. The hazard level of waste containing this product should be evaluated according to applicable regulations.

Disposal must be performed through an authorised waste management firm, in compliance with national and local regulations.

Waste transportation may be subject to ADR restrictions.

CONTAMINATED PACKAGING

Contaminated packaging must be recovered or disposed of in compliance with national waste management regulations.

SECTION 14. Transport information

14.1. UN number or ID number

ADR / RID: ADR EXEMPT IMDG: IMDG CODE EXEMPT

IATA: 3334

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SECTION 14. Transport information .../>>

14.2. UN proper shipping name

ADR / RID: ADR EXEMPT IMDG: IMDG CODE EXEMPT

IATA: AVIATION REGULATED LIQUID, N.O.S.

14.3. Transport hazard class(es)

ADR / RID: ADR EXEMPT

IMDG: IMDG CODE EXEMPT

IATA: Class: 9 Label: 9



14.4. Packing group

ADR / RID: ADR EXEMPT

IMDG: IMDG CODE EXEMPT

IATA: II

14.5. Environmental hazards

ADR / RID: ADR EXEMPT

IMDG: IMDG CODE EXEMPT

IATA: NO

14.6. Special precautions for user

ADR / RID: HIN - Kemler: - Limited Quantities: - Tunnel restriction code: -

Special provision: -

IMDG: EMS: - Limited Quantities: -

IATA: Cargo: Maximum quantity: 450 L Packaging instructions: 964

Pass.: Maximum quantity: 450 L Packaging instructions: 964

Special provision: A27

14.7. Maritime transport in bulk according to IMO instruments

Information not relevant

SECTION 15. Regulatory information

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

Seveso Category - Directive 2012/18/EU: None

Restrictions relating to the product or contained substances pursuant to Annex XVII to EC Regulation 1907/2006

Product

Point 3

Contained substance

Point 75

Regulation (EU) 2019/1148 - on the marketing and use of explosives precursors

not applicable

Substances in Candidate List (Art. 59 REACH)

On the basis of available data, the product does not contain any SVHC in percentage ≥ than 0,1%.

Substances subject to authorisation (Annex XIV REACH)

None

Substances subject to exportation reporting pursuant to Regulation (EU) 649/2012:

None

Substances subject to the Rotterdam Convention:

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SECTION 15. Regulatory information .../>>

None

Substances subject to the Stockholm Convention:

None

Healthcare controls

Workers exposed to this chemical agent must not undergo health checks, provided that available risk-assessment data prove that the risks related to the workers' health and safety are modest and that the 98/24/EC directive is respected.

German regulation on the classification of substances hazardous to water (AwSV, vom 18. April 2017)

WGK 3: Severe hazard to waters

15.2. Chemical safety assessment

A chemical safety assessment has not been performed for the preparation/for the substances indicated in section 3.

SECTION 16. Other information

Text of hazard (H) indications mentioned in section 2-3 of the sheet:

Eye Irrit. 2 Eye irritation, category 2 Skin Irrit. 2 Skin irritation, category 2

STOT SE 3 Specific target organ toxicity - single exposure, category 3

H319 Causes serious eye irritation.
H315 Causes skin irritation.

H335 May cause respiratory irritation.

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

LEGEND:

- ADR: European Agreement concerning the carriage of Dangerous goods by Road
- ATE: Acute Toxicity Estimate
- CAS: Chemical Abstract Service Number
- CE50: Effective concentration (required to induce a 50% effect)
- CE: Identifier in ESIS (European archive of existing substances)
- CLP: Regulation (EC) 1272/2008
- DNEL: Derived No Effect Level
- EmS: Emergency Schedule
- GHS: Globally Harmonized System of classification and labeling of chemicals
- IATA DGR: International Air Transport Association Dangerous Goods Regulation
- IC50: Immobilization Concentration 50%
- IMDG: International Maritime Code for dangerous goods
- IMO: International Maritime Organization
- INDEX: Identifier in Annex VI of CLP
- LC50: Lethal Concentration 50%
- LD50: Lethal dose 50%
- OEL: Occupational Exposure Level
- PBT: Persistent bioaccumulative and toxic as REACH Regulation
- PEC: Predicted environmental Concentration
- PEL: Predicted exposure level
- PNEC: Predicted no effect concentration
- REACH: Regulation (EC) 1907/2006
- RID: Regulation concerning the international transport of dangerous goods by train
- TLV: Threshold Limit Value
- TLV CEILING: Concentration that should not be exceeded during any time of occupational exposure.
- TWA: Time-weighted average exposure limit
- TWA STEL: Short-term exposure limit
- VOC: Volatile organic Compounds
- vPvB: Very Persistent and very Bioaccumulative as for REACH Regulation
- WGK: Water hazard classes (German).

GENERAL BIBLIOGRAPHY

- 1. Regulation (EC) 1907/2006 (REACH) of the European Parliament
- 2. Regulation (EC) 1272/2008 (CLP) of the European Parliament
- 3. Regulation (EU) 2020/878 (II Annex of REACH Regulation)
- 4. Regulation (EC) 790/2009 (I Atp. CLP) of the European Parliament
- 5. Regulation (EU) 286/2011 (II Atp. CLP) of the European Parliament 6. Regulation (EU) 618/2012 (III Atp. CLP) of the European Parliament
- 7. Regulation (EU) 487/2013 (IV Atp. CLP) of the European Parliament



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SECTION 16. Other information .../>>

- 8. Regulation (EU) 944/2013 (V Atp. CLP) of the European Parliament
- 9. Regulation (EU) 605/2014 (VI Atp. CLP) of the European Parliament
- 10. Regulation (EU) 2015/1221 (VII Atp. CLP) of the European Parliament
- 11. Regulation (EU) 2016/918 (VIII Atp. CLP) of the European Parliament
- 12. Regulation (EU) 2016/1179 (IX Atp. CLP)
- 13. Regulation (EU) 2017/776 (X Atp. CLP)
- 14. Regulation (EU) 2018/669 (XI Atp. CLP)
- 15. Regulation (EU) 2019/521 (XII Atp. CLP)
- 16. Delegated Regulation (UE) 2018/1480 (XIII Atp. CLP)
- 17. Regulation (EU) 2019/1148
- 18. Delegated Regulation (UE) 2020/217 (XIV Atp. CLP)
- 19. Delegated Regulation (UE) 2020/1182 (XV Atp. CLP)
- 20. Delegated Regulation (UE) 2021/643 (XVI Atp. CLP)
- 21. Delegated Regulation (UE) 2021/849 (XVII Atp. CLP)
- 22. Delegated Regulation (UE) 2022/692 (XVIII Atp. CLP)
- The Merck Index. 10th Edition
- Handling Chemical Safety
- INRS Fiche Toxicologique (toxicological sheet)
- Patty Industrial Hygiene and Toxicology
- N.I. Sax Dangerous properties of Industrial Materials-7, 1989 Edition
- IFA GESTIS website
- ECHA website
- Database of SDS models for chemicals Ministry of Health and ISS (Istituto Superiore di Sanità) Italy

Note for users:

The information contained in the present sheet are based on our own knowledge on the date of the last version. Users must verify the suitability and thoroughness of provided information according to each specific use of the product.

This document must not be regarded as a guarantee on any specific product property.

The use of this product is not subject to our direct control; therefore, users must, under their own responsibility, comply with the current health and safety laws and regulations. The producer is relieved from any liability arising from improper uses.

Provide appointed staff with adequate training on how to use chemical products.

CALCULATION METHODS FOR CLASSIFICATION

Chemical and physical hazards: Product classification derives from criteria established by the CLP Regulation, Annex I, Part 2. The data for evaluation of chemical-physical properties are reported in section 9.

Health hazards: Product classification is based on calculation methods as per Annex I of CLP, Part 3, unless determined otherwise in Section 11

Environmental hazards: Product classification is based on calculation methods as per Annex I of CLP, Part 4, unless determined otherwise in Section 12