

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING**1.1 Product identifier**

Product name:

ELASTOGUM VERDE

UFI code:

9CRV-X0WK-F00M-E79H

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

Waterproofing product

Use: Professional

1.3 Details of the supplier of the safety data sheet

Company name:

Imper Italia srl

Address:

Via Rita Atria, 9

10079 Mappano (TO)

Telephone:

+39 011 2225 449

Competent person responsible for the SDS:

safety@imper.it

1.4 Emergency telephone number

CAVp "Osp. Pediatrico Bambino Gesù" - Roma

Tel. +39 06 68593726

Az. Osp. Univ. Foggia

Tel. +39 0881 732326

Az. Osp. "A. Cardarelli" – Napoli

Tel. +39 081 7472870

CAV Policlinico "Umberto I" – Roma

Tel. +39 06 49978000

CAV Policlinico "A. Gemelli" – Roma

Tel. +39 06 3054343

Az. Osp. "Careggi" U.O. Tossicologia Medica – Firenze

Tel. +39 055 7947819

CAV Centro Nazionale di Informazione Tossicologica – Pavia

Tel. +39 0382 24444

Osp. Niguarda Ca' Granda – Milano

Tel. +39 02 66101029

Azienda Ospedaliera Papa Giovanni XXII – Bergamo

Tel. +39 800 883300

Azienda Ospedaliera Universitaria Integrata Verona

Tel. +39 800 011858

SECTION 2: HAZARD IDENTIFICATION**2.1 Classification of the substance or mixture**

The product is classified as dangerous pursuant to Regulation (EC) 1272/2008 (CLP) (and subsequent amendments and adjustments).

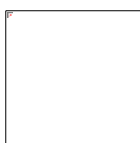
Classification according to Regulation (EC) no. 1272/2008 (CLP)

Flam. Liq. 3; H226

STOT SE 3 H335

STOT SE 3; H336

Aquatic Chronic 2; H411

2.2 Label elements

Pictograms:

Warnings: Warning

H statements: H226 Flammable liquid and vapour.

H335 May cause respiratory irritation.

H336 May cause drowsiness or dizziness.

H411 Toxic to aquatic life with long lasting effects.

P phrases: P210 Keep away from heat, hot surfaces, sparks, open flames and other sources of ignition. Not smoking.

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.

P271 Use only outdoors or in a well-ventilated area.

P273 Do not release into the environment.

P403 + P235 Store in a well-ventilated place. Keep in a cool place.

P405 Keep locked up.

P501 Dispose of contents/container in accordance with local/national regulations.

Contains: Solvent naphtha light; 2-methoxy-1-methylethyl acetate.

Directive 2004/42 EC (VOC)

Ready-to-use product VOC: 385.00 gr/l

2.3 Other hazards

vPvB substances: None - PBT substances: None

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

NA

3.2 Mixtures

1.CAS number 2.N. EC 3.N. Index 4.N. REACH	Name	Weight [%]	Classification 1272/2008 (CLP)
1.471-34-1 2.207-439-9 3.Not available 4.01-2119486795-18-XXXX	Calcium carbonate	20-30	Substance with an occupational exposure limit in the workplace.
1.64742-95-6 2.265-199-0 3.649-356-00-4 4.01-2119486773-24-XXXX	Solvent naphtha light	20-30	Flam. Liq. 3; H226 Asp. Tox. 1; H304 STOT SE 3 H335 STOT SE 3; H336 Aquatic Chronic 2; H411 EUH 066 DECLP (CLP)*
1.108-65-6 2.203-603-9 3.607-195-00-4 4.01-2119475791-29-XXXX	2-methoxy-1-methylethyl acetate	15-20	Flam. Liq. 3; H226 STOT SE 3; H336
1.13463-67-7 2.236-675-5 3.Not Available 4.01-2119489379-17-XXXX	Titanium dioxide	1-5	Substance with an occupational exposure limit in the workplace.

The full text of the H phrases is given in section 16 of the safety data sheet.

*DECLP (CLP): Substance classified in accordance with note P of Annex VI of EC Regulation 1272/2008. Classification as a carcinogen or mutagen is not necessary if it can be demonstrated that the substance contains benzene in a percentage lower than 0.1% w/w (EINECS n. 200-753-7). If the substance is

not classified as carcinogenic, at least the precautionary statements (P102-)P260-P262-P301 + P310-P331 must appear. This note applies only to certain petroleum-derived composite substances contained in Part 3.

SECTION 4: FIRST AID MEASURES

4.1 Description of first aid measures

Eye contact	Remove any contact lenses. Wash immediately and abundantly with water for at least 30 minutes, opening the eyelids wide. Consult a doctor immediately.
Skin contact	Take off contaminated clothing. Wash the contaminated garments before reusing them.
Ingestion	Rinse your mouth thoroughly with water. Do not induce vomiting. If vomiting occurs, the head should be kept low so that the vomit does not enter the lungs. Contact a doctor.
Inhalation	Move the affected person to fresh air. When breathing is difficult, appropriately trained personnel can assist the affected person by administering oxygen. Consult a doctor if the discomfort continues.

4.2 Most important symptoms and effects, both acute and delayed

For symptoms and effects due to the substances contained, see chap. 11.

4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: FIREFIGHTING MEASURES

5.1 Extinguishing media

SUITABLE EXTINGUISHING MEANS

Use a fire extinguisher suitable for the surrounding area, e.g. carbon dioxide, foam, dust and water spray.

UNSUITABLE EXTINGUISHING MEANS

Do not use water jets as it could disperse or spread the fire.

5.2 Special hazards derived from the substance or mixture

DANGERS DUE TO EXPOSURE IN THE EVENT OF FIRE

Do not breathe combustion products.

5.3 Advice for firefighters

GENERAL INFORMATION

Cool the containers with jets of water to avoid decomposition of the product and the development of substances potentially dangerous to health. Always wear full fire protection equipment.

EQUIPMENT FOR FIRE-FIGHTING OFFICERS

Normal fire-fighting clothing, such as an open circuit compressed air breathing apparatus (EN 137), flame retardant suit (EN469), flame retardant gloves (EN 659) and fire fighter boots (HO A29 or A30).

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Avoid contact with skin and eyes. Wear protective clothing as described in Section 8 of this safety data sheet. Provide adequate ventilation

6.2 Environmental precautions

Prevent the product from spilling or entering drains or waterways. Spills or uncontrolled discharges into watercourses should be reported immediately to the Environment Agency or other appropriate regulatory body.

6.3 Methods and materials for containment and cleanup

Absorb spillage with non-combustible absorbent material. Containers with collected material must be labeled correctly.

6.4 Reference to other sections

See also sections 8 and 13

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for Safe Handling

Keep away from heat, sparks and open flames, do not smoke or use matches or lighters. Without adequate ventilation, vapors can accumulate on the ground and ignite even remotely, if triggered, with the risk of backfire. Avoid the accumulation of electrostatic charges. Do not eat, drink or smoke during use. Remove contaminated clothing and protective equipment before entering eating areas. Avoid dispersing the product into the environment.

7.2 Conditions for safe storage, including any incompatibilities

Store only in the original container. Store in a cool, well-ventilated place, away from heat sources, open flames, sparks and other sources of ignition. Store containers away from any incompatible materials, checking section 10.

7.3 Specific end use(s)

Information not available.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

OCCUPATIONAL EXPOSURE LIMITS (OELs)

Calcium carbonate

TWA/8h: 10 mg/m³ Inhalable fraction (TLV-ACGIH)

TWA/8h: 3 mg/m³ Respirable fraction (TLV-ACGIH)

2-methoxy-1-methylethyl acetate

TWA/8h: 50 ppm / 275 mg/m³

STEL/15min: 550 mg/m³ / 100 ppm

Titanium dioxide

TWA/8h: 10 mg/m³

Derived No effect level (DNEL)

Calcium carbonate

Inhalation 1 mg/m³ (Systemic, chronic) *

Oral 0.04 mg/kg bw/day (Systemic, chronic) *

Inhalation 0.3 mg/m³ (Local, chronic) *

Oral 6.1 mg/kg bw/day (Systemic, acute) *

Inhalation 4 mg/m³ (Local, chronic) *

Inhalation 10 mg/m³ (Systemic, chronic)

Inhalation 1 mg/m³ (Local, chronic)

Inhalation 4 mg/m³ (Local, chronic)

Solvent naphtha light

Inhalation 1.9 mg/m³ (Systemic, chronic)

Inhalation 837.5 mg/m³ (Local, chronic)

Inhalation 1 286.4 mg/m³ (Systemic, acute)

Inhalation 1 066.67 mg/m³ (Local, acute)

Inhalation 0.41 mg/m³ (Systemic, chronic) *

Inhalation 178.57 mg/m³ (Local, chronic) *

Inhalation 1 152 mg/m³ (Systemic, acute) *

Inhalation 640 mg/m³ (Local, acute) *

2-methoxy-1-methylethyl acetate

Cutaneous 796 mg/kg bw/day (Systemic, chronic)

Inhalation 275 mg/m³ (Systemic, chronic)

Inhalation 550 mg/m³ (Local, acute)

Cutaneous 320 mg/kg bw/day (Systemic, chronic) *

Inhalation 33 mg/m³ (Systemic, chronic) *

Oral 36 mg/kg bw/day (Systemic, chronic) *

Inhalation 33 mg/m³ (Local, chronic) *

Titanium dioxide

Inhalation 10 mg/m³ (Local, chronic)

Oral 700 mg/kg bw/day (Systemic, chronic)*

* Values that refer to the population

Predicted No Effect Concentration (PNEC)

Calcium carbonate

100 mg/L (STP)

2-methoxy-1-methylethyl acetate

0.635 mg/L (Water (Fresh))

6.35 mg/L (Water - intermittent release)

0.064 mg/L (Water (Marine))

3.29 mg/kg sediment dw (Sediment (Freshwater))

0.329 mg/kg sediment dw (Sediments (Marine))

0.29 mg/kg soil dw (Soil)

100 mg/L (STP)

Titanium dioxide

0.184 mg/L (Fresh water)

0.0184 mg/L (Sea water)

1000 mg/kg sediment dw (Sediment (Freshwater))

100 mg/kg sediment dw (Sediments (Marine))

100 mg/kg soil dw (Soil)

100 mg/L (STP)

Technical checks

Ensure adequate ventilation, especially in enclosed areas.

Make sure eye washes and showers are close to the workplace.

Use anti-exposure equipment

Provide an emergency exit.

8.2 Exposure controls

Personal protective equipment must bear the CE marking which certifies their compliance with current regulations.

Provide emergency shower with eyecup.

HAND PROTECTION

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

Recommended: nitrile rubber, butyl rubber

For the final choice of work glove material, the following must be considered: compatibility, degradation, breaking time and permeation.

In the case of preparations, the resistance of work gloves to chemical agents must be checked before use as it is unpredictable. The gloves have a wear time that depends on the duration and method of use.

SKIN PROTECTION

Wear work clothes with long sleeves and safety footwear for professional category II use (ref. Regulation 2016/425 and standard EN ISO 20344). Wash with soap and water after removing protective clothing.

Consider providing anti-static clothing if the work environment presents a risk of explosiveness.

EYE PROTECTION

Chemical resistant splash goggles. We recommend wearing airtight protective glasses (ref. standard EN 166).

RESPIRATORY PROTECTION

If the threshold value (e.g. TLV-TWA) of the substance or one or more of the substances present in the product is exceeded, it is recommended to wear a mask in accordance with EN140. Filter type: filter for organic vapors (Type A) and P3 particles.

The use of respiratory protection means is necessary if the technical measures adopted are not sufficient to limit the worker's exposure to the threshold values taken into consideration. However, the protection offered by masks is limited.

In the event that the substance considered is odorless or its olfactory threshold is higher than the relevant TLV-TWA and in case of emergency, wear an open-circuit compressed air breathing apparatus (ref. standard EN 137) or a self-contained breathing apparatus external air (ref. EN 138 standard). For the correct choice of respiratory protection device, refer to the EN 529 standard.

ENVIRONMENTAL EXPOSURE CONTROLS

Emissions from production processes, including those from ventilation equipment, should be controlled for compliance with environmental protection legislation.

Product residues must not be discharged uncontrolled into waste water or waterways.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

I wait:	Liquid
Color:	Verde
Odor:	Characteristic
Odor threshold:	ND
pH:	8
Melting point/freezing point:	ND
Initial boiling point and boiling range:	ND
Flash point:	42°C
Evaporation rate:	ND
Flammability (solid, gas):	ND
Upper/lower flammability or explosive limits:	ND
Vapor pressure:	ND
Vapor density (Air=1):	ND
Relative density:	ND
Solubility:	Soluble
Partition coefficient: n-octanol/water:	ND
Auto-ignition temperature (°C):	ND
Decomposition temperature:	ND
Viscosity:	ND
Explosive properties:	ND
Oxidizing properties:	ND

9.2 Other information

Information not available

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

There are no particular dangers of reaction with other substances under normal conditions of use.

1-METHYL-2-METHOXYETHYL ACETATE

Stable under normal conditions of use and storage.

1-METHYL-2-METHOXYETHYL ACETATE: stable, but with air it can slowly give peroxides which explode due to an increase in temperature.

10.2 Chemical stability

Stable under normal conditions

10.3 Possibility of dangerous reactions

Reactions with strong oxidizing agents.

Vapors can form explosive mixtures with air.

1-METHYL-2-METHOXYETHYL ACETATE

May react violently with: oxidizing substances, strong acids, alkali metals.

10.4 Conditions to avoid

No special precautions other than normal precautions for handling chemical products.

Avoid overheating. Avoid the accumulation of electrostatic charges. Avoid any source of ignition.

10.5 Incompatible materials

Materials to avoid: strong oxidants.

1-METHYL-2-METHOXYETHYL ACETATE

Incompatible with: oxidizing substances, strong acids, alkali metals.

10.6 Hazardous decomposition products

Hazardous decomposition products:

No dangerous decomposition products if the requirements for storage and handling are respected.

Due to thermal decomposition or in the event of fire, gases and vapors potentially harmful to health can be released.

SECTION 11: TOXICOLOGICAL INFORMATION

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

Toxicological information on the mixture: ND

Toxicological information regarding the main substances present in the mixture:

Unless otherwise specified, the data required by Regulation (EU) 878/2020 indicated below are to be considered NA:

a) acute toxicity;

Calcium carbonate

Oral (Rat) LD50: > 6450 mg/kg

Solvent naphtha light

Dermal (rabbit) LD50: >1900 mg/kg

Inhalation (Rat) LC50: >4.42 mg/L4h

Oral (Rat) LD50: >4500 mg/kg

1-methyl-2-methoxyethyl acetate

LD50 (Dermal): > 5000 mg/kg Rat

LD50 (Oral): > 5000 mg/kg Rat

Titanium dioxide

Oral (Rat) LD50: > 5000 mg/kg OECD 425

Dermal (Rabbit) LD50: > 10000 mg/kg

Inhalation (Rat) LC50: 3.43 - 5.09 mg/l/4h OECD 403

b) skin corrosion/irritation;

c) serious eye damage/serious eye irritation;

d) respiratory or skin sensitization;

e) mutagenicity of germ cells;

f) carcinogenicity;

g) reproductive toxicity;

h) specific target organ toxicity (STOT) — single exposure;

The product is classified STOT SE 3 H335

The product is classified STOT SE 3; H336

(i) specific target organ toxicity (STOT) — repeated exposure;

j) danger in case of aspiration.

11.2 Information on other hazards

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

The product is classified Flam. Liq. 3; H226

The product is classified Aquatic Chronic 2; H411

SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity

Calcium carbonate

EC50 72h Algae > 14 mg/l

NOEC(ECx) 1h Fish 4-320 mg/l

LC50 96h Fish >165200 mg/L

Solvent naphtha light

NOEC(ECx) 72h Algae or other aquatic plants 1mg/l

EC50 72h Algae or other aquatic plants 19mg/l

EC50 96h Algae or other aquatic plants 64mg/l

EC50 48h Crustaceans 6.14mg/l

1-methyl-2-methoxyethyl acetate

EC50 72h Algae or other aquatic plants >1000mg/l

LC50 96h Fish 100-180mg/l

EC50 48h Crustaceans 373mg/l

NOEC(ECx) 336h Fish 47.5mg/l

EC50 96h Algae or other aquatic plants >1000mg/l

Titanium dioxide

LC50 96 Fish 1000 mg/l

EC50 48 Crustaceans 100mg/l

EC50 72 Algae or other aquatic plants 100mg/l

NOEC 96 Algae or other aquatic plants 5600 mg/l

12.2 Persistence and degradability**Ingredient**

Titanium dioxide

1-METHYL-2-METHOXYETHYL ACETATE

Solubility in water > 10000 mg/l

Rapidly degradable

Persistence: Water/Soil

HIGH

Persistence: Air

HIGH

12.3 Bioaccumulative potential

1-METHYL-2-METHOXYETHYL ACETATE

Partition coefficient: n-octanol/water 1.2

Titanium dioxide

LOW (BCF = 10)

12.4 Mobility in soil

2-methoxy-1-methylethyl acetate

HIGH (Log KOC = 1.838)

Titanium dioxide

LOW (KOC = 23.74)

12.5 Results of PBT and vPvB evaluation

Based on available data, the product does not contain PBT or vPvB substances in percentages greater than 0.1%.

12.6 Endocrine disrupting properties

The substance/mixture does not contain components considered to have endocrine disrupting properties according to Article 57(f) of REACH.

12.7 Other adverse effects

Information not available

SECTION 13: DISPOSAL CONSIDERATIONS**13.1 Waste treatment methods**

Reuse if possible. Product residues are to be considered hazardous special waste. The dangerousness of waste that partly contains this product must be assessed based on current legislative provisions. Disposal must be entrusted to a company authorized to manage waste, in compliance with national and possibly local regulations.

Transport of waste may be subject to ADR.

CONTAMINATED PACKAGING

Contaminated packaging must be sent for recovery or disposal in compliance with national waste management regulations.

SECTION 14: INFORMATION ON TRANSPORT**14.1 UN number or ID number**

ADR-UN Number: 1263

IATA-UN Number: 1263

IMDG-UN Number: 1263

14.2 UN proper shipping name.

ADR-Shipping Name: PAINTS (Solvent naphta light)

IATA-Shipping Name: PAINTS (Solvent naphta light)

14.3 Transport hazard class(es).

ADR Class: 3

ADR - Hazard identification number: 30

IATA Class: 3

IATA label: 3

IMDG Class: 3

14.4 Packing group

ADR-Packing Group: III

IATA-Packing group: III

IMDG-Packing group: III

14.5 Environmental hazards.

ADR-Environmental pollutant: Yes

IMDG-Marine pollutant: Yes

14.6 Special precautions for user.

ADR-SP: 163 367 650

ADR-Transport category (Tunnel restriction code): 3 (D/E)

IATA-Passenger Aircraft: 355

IATA-Subsidiary hazards: -

IATA-Cargo Aircraft: 366

IATA-SP: A3 A72 A192

IATA-ERG: 3L

IMDG-EMS: FE,SE

IMDG-Subsidiary hazards: -

IMDG-Stowage and handling: Category A

IMDG-Segregation: -

14.7 Maritime transport in bulk according to IMO instruments

Information not relevant.

SECTION 15: REGULATORY INFORMATION**15.1 Specific health safety and environment standards and legislation for the substance or mixture**Seveso Category:

P5c, E2

Restrictions relating to the product or substances contained according to Annex XVII Regulation (EC) 1907/2006.

Product; 3 – 40

Substances in Candidate List (Art. 59 REACH)

None

Substances subject to authorization (Annex XIV REACH).

None.

Substances subject to the Rotterdam Convention:

None

Substances subject to the Stockholm Convention:

None

Safety controls

Workers exposed to this chemical agent dangerous to health must be subjected to health surveillance carried out in accordance with the provisions of the art. 41 of Legislative Decree 81 of 9 April 2008 unless the risk to the safety and health of the worker has been assessed as irrelevant, in accordance with the provisions of art. 224 paragraph 2.

15.2 Chemical safety assessment

A chemical safety assessment has been developed for the following substances:

1-METHYL-2-METHOXYETHYL ACETATE

SECTION 16: OTHER INFORMATION**Text of the hazard statements (H) mentioned in sections 2-3 of the sheet:**

Flam. Liq. 3 Flammable liquid, category 3
Asp. Tox. 1 Danger in case of aspiration - category 1
STOT SE 3 Specific target organ toxicity - single exposure, category 3
Aquatic Chronic 2 Hazardous to the aquatic environment, chronic toxicity, category 2
H226 Flammable liquid and vapour.
H304 May be fatal if swallowed and enters airways.
H335 May cause respiratory irritation.
H336 May cause drowsiness or dizziness.
H411 Toxic to aquatic life with long lasting effects.

Classification and procedure used to derive it according to Regulation (EC) 1272/2008 [CLP] in relation to mixtures:

Flam. Liq. 3; H226 – Based on experimental data
STOT SE 3 H335 – Calculation method
STOT SE 3; H336 – Calculation method
Aquatic Chronic 2; H411 – Calculation method

LEGEND:

- ADR: European Agreement for the transport of dangerous goods by road
- CAS NUMBER: Chemical Abstract Service number
- EC50: Concentration that gives effect to 50% of the population subject to testing
- CE NUMBER: Identification number in ESIS (European archive of existing substances)
- CLP: EC Regulation 1272/2008
- DNEL: Derived no-effect level
- EmS: Emergency Schedule
- GHS: Globally Harmonized System for the Classification and Labeling of Chemical Products
- IATA DGR: Regulations for the transport of dangerous goods of the International Air Transport Association
- IC50: Immobilization concentration of 50% of the population subject to testing
- IMDG: International Maritime Code for the Transport of Dangerous Goods
- IMO: International Maritime Organization
- INDEX NUMBER: Identification number in Annex VI of CLP
- LC50: Lethal concentration 50%
- LD50: Lethal dose 50%
- OEL: Occupational exposure level
- PBT: Persistent, bioaccumulating and toxic according to REACH
- PEC: Predictable environmental concentration
- PEL: Predictable level of exposure
- PNEC: Predictable no-effect concentration
- REACH: EC Regulation 1907/2006
- RID: Regulations for the international transport of dangerous goods by train

- TLV: Threshold limit value
- TLV CEILING: Concentration that must not be exceeded during any moment of occupational exposure.
- TWA STEL: Short-term exposure limit
- TWA: Weighted average exposure limit
- VOC: Volatile organic compound
- vPvB: Very persistent and very bioaccumulating according to Reach.

GENERAL BIBLIOGRAPHY:

Regulation (EC) 1907/2006 of the European Parliament (REACH)
Regulation (EC) 1272/2008 of the European Parliament (CLP)
Regulation (EU) 2020/878 (Annex II REACH Regulation)
Regulation (EC) 790/2009 of the European Parliament (I Atp. CLP)
Regulation (EU) 286/2011 of the European Parliament (II Atp. CLP)
Regulation (EU) 618/2012 of the European Parliament (III Atp. CLP)
Regulation (EU) 487/2013 of the European Parliament (IV Atp. CLP)
Regulation (EU) 944/2013 of the European Parliament (V Atp. CLP)
Regulation (EU) 605/2014 of the European Parliament (VI Atp. CLP)
Regulation (EU) 2015/1221 of the European Parliament (VII Atp. CLP)
Regulation (EU) 2016/918 of the European Parliament (VIII Atp. CLP)
Regulation (EU) 2016/1179 (IX Atp. CLP)
Regulation (EU) 2017/776 (X Atp. CLP)
Regulation (EU) 2018/669 (XI Atp. CLP)
Regulation (EU) 2019/521 (XII Atp. CLP)
Delegated Regulation (EU) 2018/1480 (XIII Atp. CLP)
Regulation (EU) 2019/1148
Delegated Regulation (EU) 2020/217 (XIV Atp. CLP)
Delegated Regulation (EU) 2020/1182 (XV Atp. CLP)
Delegated Regulation (EU) 2021/643 (XVI Atp. CLP)
Delegated Regulation (EU) 2021/849 (XVII Atp. CLP)
Delegated Regulation (EU) 2022/692 (XVIII Atp. CLP)
Delegated Regulation (EU) 2023/1434 (XIX Atp. CLP)
Delegated Regulation (EU) 2023/1435 (XX Atp. CLP)
Delegated Regulation (EU) 2024/197 (XXI Atp. CLP)

The Merck Index. Ed. 10
Handling Chemical Safety
Niosh - Registry of Toxic Effects of Chemical Substances
INRS - Fiche Toxicologique
Patty - Industrial Hygiene and Toxicology
NI Sax - Dangerous properties of Industrial Materials-7 Ed., 1989
ECHA Agency Website

Note to the user:

The information contained in this sheet is based on the knowledge available to us at the date of the latest version. The user must ensure the suitability and completeness of the information in relation to the specific use of the product.

This document should not be interpreted as a guarantee of any specific property of the product.

Since the use of the product does not fall under our direct control, it is the user's obligation to observe the laws and regulations in force regarding hygiene and safety under his own responsibility. We do not assume responsibility for improper use.

Provide adequate training to personnel responsible for using chemical products.

Changes compared to the previous version:

01/02/03/04/05/06/07/08/09/10/11/12/13/14/15/16