

Safety Data Sheet

environment, chronic toxicity		
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2.2 Label elements

Labelling according to Regulation (EC) No. 1272/2008:

Hazard pictograms:



Signal word: DANGER

Hazard statements:

- H225 Highly flammable liquid and vapour.
- H351 Suspected of causing cancer.
- H304 May be fatal if swallowed and enters airways.
- H315 Causes skin irritation.
- H336 May cause drowsiness or dizziness.
- H411 Toxic to aquatic life with long lasting effects.

Precautionary statement:

Prevention:

- P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
- P331 Do NOT induce vomiting.
- P280 Wear protective gloves/ protective clothing / eye protection / face protection.
- P301+P310 IF SWALLOWED: immediately call a POISON CENTER / doctor / . . .
- P273 Avoid release to the environment.

Disposal

- P501 Dispose of contents/containers in accordance with local regulation

Contains:

TETRACHLOROETHYLENE
 C7 n-alkanes, isoalkanes, cyclic hydrocarbons contains cyclohexane
 ETHYL ACETATE

2.3 Other hazards

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

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The product does not contain substances with endocrine disrupting properties in concentration $\geq 0.1\%$.

SECTION 3: Composition / information on ingredients

3.1 Mixtures:

Chemical name	INDEX number EC-Number CAS Nr. REACH Reg.	%	Classification according to EC 1272/2008	
			Hazardous class/hazardous category	Hazardous phrases
C7 n-alkanes, isoalkanes, cyclic hydrocarbons contains cyclohexane	/ 927-510-4 / 01-2119475515-33-0000	$50 \leq x < 85$	Flam. Liq. 2 Asp. Tox. 1 Skin Irrit. 2 STOT SE 3 Aquatic Chronic 2	H225 H304 H315 H336 H411
Ethyl acetate	607-022-00-5 205-500-4 141-78-6	$4 \leq x < 6$	Flam. Liq. 2 Eye Irrit. 2 STOT SE 3	H225 H319 H336 EUH066
Tetracloroethylene	602-028-00-4 204-825-9 127-18-4	$2 \leq x < 5$	Carc. 2 Aquatic Chronic 2	H351 H411

SECTION 4: First Aid Measures

4.1 Description of first aid measures

In case of doubt or in the presence of symptoms contact a doctor and show him this document. In case of more severe symptoms, ask for immediate medical aid.

EYES: Remove, if present, contact lenses if the situation allows you to do so easily. Wash immediately with plenty of water for at least 15 minutes, opening the eyelids fully. Get medical advice/attention.

SKIN: Take off contaminated clothing. Wash immediately and thoroughly with running water (and soap if possible). Get medical advice. Avoid further contact with contaminated clothing.

INGESTION: Do not induce vomiting unless explicitly authorised by a doctor. Do not give anything by mouth to an unconscious person. Get medical advice/attention.

INHALATION: Remove victim to fresh air, away from the accident scene. In the event of respiratory symptoms (coughing, wheezing, breathing difficulty, asthma) keep the victim in a comfortable position for breathing. If necessary, administer oxygen. If the subject stops breathing, administer artificial respiration. Get medical advice/attention.

Rescuer protection

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It is good practice for rescuers lending support to a person who has been exposed to a chemical substance or to a mixture to wear personal protective equipment. The nature of such protection depends on the hazard level of the substance or mixture, on the type of exposure and on the extent of the contamination. In the absence of other more specific indications, use of disposable gloves in the event of possible contact with body fluids is recommended. For the type of PPE suitable for the characteristics of the substance or mixture, see section 8.

4.2 Most important symptoms and effects, both acute and delayed

Specific information on symptoms and effects caused by the product are unknown.
DELAYED EFFECTS: Based on the information currently available, there are no known cases of delayed effects following exposure to this product.

4.3 Indication of any immediate medical attention and special treatment needed

IF exposed or concerned: Get medical advice / attention.
Means to have available in the workplace for specific and immediate treatment
Running water for skin and eye wash.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable:

SUITABLE EXTINGUISHING EQUIPMENT

Extinguishing substances are: carbon dioxide, foam, chemical powder. For product loss or leakage that has not caught fire, water spray can be used to disperse flammable vapours and protect those trying to stem the leak.

UNSUITABLE EXTINGUISHING EQUIPMENT

Do not use jets of water. Water is not effective for putting out fires but can be used to cool containers exposed to flames to prevent explosions.

5.2 Special hazards arising from the substance or mixture

HAZARDS CAUSED BY EXPOSURE IN THE EVENT OF FIRE

Excess pressure may form in containers exposed to fire at a risk of explosion. 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.

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SPECIAL PROTECTIVE EQUIPMENT FOR FIRE-FIGHTERS

Normal firefighting 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.

Send away individuals who are not suitably equipped. Use explosion-proof equipment.

Eliminate all sources of ignition (cigarettes, flames, sparks, etc.) from the leakage site.

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

Safe handling: see section 7. Personal protection equipment: see section 8. Disposal: see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Keep away from heat, sparks and naked flames; do not smoke or use matches or lighters. Without adequate ventilation, vapours may accumulate at ground level and, if ignited, catch fire even at a distance, with the danger of backfire. Avoid bunching of electrostatic charges. When performing transfer operations involving large containers, connect to an earthing system and wear antistatic footwear. Vigorous stirring and flow through the tubes and equipment may cause the formation and accumulation of electrostatic charges.

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In order to avoid the risk of fires and explosions, never use compressed air when handling. Open containers with caution as they may be pressurized. Do not eat, drink or smoke during use. Avoid leakage of the product into the environment.

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. Store in a cool and well ventilated place, keep far away from sources of heat, naked flames and sparks and other sources of ignition. Keep containers away from any incompatible materials, see section 10 for details.

7.3. Specific end use(s)

Product is intended to be used in dental laboratories.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Council Directive 98/24/EC with all implementations and amendments

Official Gazette RS, No. [100/01](#), [39/05](#), [53/07](#), [102/10](#), [43/11](#) – ZVZD-1, [38/15](#), [78/18](#), [78/19](#), [72/21](#), [29/24](#)

Ingredients with limit values that have to be considered and measured in the working place

Ethylacetate

OEL	Current exposure: 1468 mg/m ³ , 400 ppm Long-term exposure: 734 mg/m ³ , 200 ppm (Y, EU ⁴)*
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Tetracloroethylene

OEL	Current exposure: 275 mg/m ³ , 40 ppm Long-term exposure: 138 mg/m ³ , 20 ppm (K, Y, BAT, EU ⁴)*
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*K - The property of substances passing more easily into the body through the skin.

Y - Substances for which there is no danger to the fetus based on limited values and BAT values;
 BAT - Biological limit value - a biological limit value is determined, which represents the warning level of a hazardous chemical substance and its metabolites in tissues, body fluids or exhaled air, regardless of whether the hazardous chemical substance is introduced into the organism by inhalation, ingestion or through the skin.

EU⁴ - Limit value set by Commission Directive 2017/164/EU of 31 January 2017 establishing a fourth list of indicative occupational exposure limit values pursuant to Council Directive 98/24/EC and amending Commission Directives 91/322/EEC, 2000/39/EC and 2009/161/EU (OJ L 27, 1.2.2017, p. 115).

Limit under which substance has not effect (DNEL)

No data available.

For seen concentration without effect (PNEC):

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No data available.

8.2 Exposure controls

Personal protective equipment in accordance with Regulation (EU) 2016/425 and list of harmonized standards for personal protection equipment 2018/C 209/03.

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.

The following should be considered when choosing work glove material (see standard EN 374): compatibility, degradation, permeability time. 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. Consider the appropriateness of providing antistatic clothing in the case of working environments in which there is a risk of explosion.

EYE PROTECTION

Wear airtight protective goggles (see standard EN ISO 16321).

RESPIRATORY PROTECTION

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. Use a mask with a type AX filter whose class (1, 2 or 3) must be chosen according to the limit of use concentration. (see standard EN 14387). 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 apparatus (in compliance with standard EN 138). For a correct choice of respiratory protection device, see standard EN 529.

8.2.2 Control of environment protection

ENVIRONMENTAL EXPOSURE CONTROLS

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

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standards. Product residues must not be indiscriminately disposed of with waste water or by dumping in waterways.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state	liquid
Colour	Straw yellow
Odour	Sweet solvent
pH	No data available
Density	N.A.
Boiling point	N.A.
Flash point	n.a.
Melting point	n.a.
Auto ignition temperature	N.A.
Upper explosion limit	N.A.
Lower explosion limit	N.A.
Solid content	N.A.
Decomposition temperature	n.a.
Density and/or relative density	0,71
pH	No data available
Solubility in water	Not soluble
Partition coefficient n-octanol/water (log value)	n.a.
Vapour pressure	N.A.
Kinematic viscosity	n.a.
Oxidative properties	n.a.
Particle characteristics	n.a.

9.2 Other information

VOC (Directive 2010/75/EU) 9,94 % - 70,41 g/litre

VOC (volatile carbon) 3,56 % - 25,21 g/litre

Solubility/other: Liposolubility: Complete

SECTION 10: Stability and reactivity

10.1 Reactivity

There are no particular risks of reaction with other substances in normal conditions of use.

TETRACHLOROETHYLENE

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Decomposes at temperatures above 150°C/302°F. Decomposes if exposed to: UV rays, moisture.

ETHYL ACETATE

Decomposes slowly into acetic acid and ethanol under the effect of light, air and water.

10.2 Chemical stability

Stable under normal conditions and proper use.

10.3 Possibility of hazardous reaction

The vapours may also form explosive mixtures with the air.

TETRACHLOROETHYLENE

Risk of explosion on contact with: alkaline metals, aluminium, alkaline hydroxides, sodium amides. May react violently with: strong bases, strong oxidising agents, alkaline earth metals, light metals, metal powders, zinc oxide.

ETHYL ACETATE

Risk of explosion on contact with: alkaline metals, hydrides,

10.4 Conditions to avoid

Avoid overheating. Avoid bunching of electrostatic charges. Avoid all sources of ignition.

ETHYL ACETATE

Avoid exposure to: light, sources of heat, naked flames.

10.5 Incompatible materials

ETHYL ACETATE

Incompatible with: acids, bases, strong oxidants, chlorosulphuric acid.

10.6 Hazardous decomposition products

In the event of thermal decomposition or fire, gases and vapours that are potentially dangerous to health may be released.

TETRACHLOROETHYLENE

May develop: hydrogen chloride, phosgenes, chlorine, ethane tetrachloride, chlorine compounds.

SECTION 11: Toxicological information

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

TETRACHLOROETHYLENE

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WORKERS: inhalation; contact with the skin.

POPULATION: ingestion of contaminated food or water; inhalation of ambient air.
Delayed and immediate effects as well as chronic effects from short and long-term exposure

TETRACHLOROETHYLENE

Has a toxic effect on the central and peripheral nervous system, liver, kidneys and heart; the mucous membranes and the skin are irritated.

Interactive effects

Information not available

ACUTE TOXICITY

ATE (Inhalation) of the mixture: Not classified (no significant component)

ATE (Oral) of the mixture: Not classified (no significant component)

ATE (Dermal) of the mixture: Not classified (no significant component)

TETRACHLOROETHYLENE

LC50 (Inhalation vapours): 4000 ppm/4h Rat

ETHYL ACETATE

LD50 (Oral): 4,94 g/kg rabbit

LC50 (Inhalation vapours): 1500 mg/kg/4h mouse

C7 n-alkanes, isoalkanes, cyclic hydrocarbons contains cyclohexane

LD50 (Dermal): > 2920 mg/kg Species: rat

LD50 (Oral): > 5840 mg/kg Species: rat

LC50 (Inhalation mists/powders): > 23300 mg/l/4h Species : rat

SKIN CORROSION / IRRITATION

Causes skin irritation

SERIOUS EYE DAMAGE / IRRITATION

Does not meet the classification criteria for this hazard class

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

Suspected of causing cancer

TETRACHLOROETHYLENE

Classified in Group 2A (probable human carcinogen) by the International Agency for Research on Cancer (IARC).

Epidemiological studies show evidence of association between exposure to the substance and presence of various types of cancers:

bladder cancer, non-Hodgkin's lymphomas and multiple myeloma (US EPA, 2014).

Classified as a "probable carcinogen" by the US National Toxicology Program (NTP).

REPRODUCTIVE TOXICITY

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Does not meet the classification criteria for this hazard class

STOT - SINGLE EXPOSURE

May cause drowsiness or dizziness

STOT - REPEATED EXPOSURE

Does not meet the classification criteria for this hazard class

ASPIRATION HAZARD

Toxic for aspiration

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

This product is dangerous for the environment and is toxic for aquatic organisms. In the long term, it has negative effects on the aquatic environment.

12.1 Toxicity

TETRACHLOROETHYLENE

EC50 - for Crustacea 18 mg/l/48h Daphnia magna

ETHYL ACETATE

EC50 - for Crustacea 819 mg/l/48h Daphnia magna

C7 n-alkanes, isoalkanes, cyclic hydrocarbons contains cyclohexane

LC50 - for Fish 4 mg/l/24h Species: Daphnia

EC50 - for Crustacea 1,5 mg/l/48h Species: fish

12.2 Persistence and degradability

TETRACHLOROETHYLENE

Solubility in water 150 mg/l

Degradability: information not available

ETHYL ACETATE

Solubility in water > 10000 mg/l

Rapidly degradable

12.3 Bioaccumulative potential

TETRACHLOROETHYLENE

Partition coefficient: n-octanol/water 2,53

BCF 49

ETHYL ACETATE

Partition coefficient: n-octanol/water 0,68

BCF 30

12.4 Mobility in soil

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TETRACHLOROETHYLENE

Partition coefficient: soil/water 2,15

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 \geq 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

Do not allowed enter sewage system, waters, underground water.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Directive 2008/98/EC, Official Gazette RS 37/15, 69/15

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.

The management of waste arising from the use or dispersal of this product must be organised in accordance with occupational safety regulations. See section 8 for possible need for PPE.

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

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SECTION 14: Transport Information			
	ADR/RID	IMDG	IATA
14.1 UN number	UN 1993		
14.2 UN proper shipping name	FLAMMABLE LIQUID, N.O.S.		
14.3 Transport hazard class(es)			
Class	3		
Label(s)	3		
			
Hazard identification number	33	/	/
Transport category (Tunnel restriction code)	(D/E)	/	/
EmS	/	F-E, S-E	/
14.4 Packing group	II		
14.5 Environmental hazards	No environmental hazard		
14.6 Special precautions for user	ADR / RID: HIN - Kemler: 33 Limited Quantities: 1L Tunnel restriction code: (D/E) Special provision: 274, 601, 640(C-D) IMDG: EMS: F-E, S-E Limited Quantities: 1L IATA: Cargo: Maximum quantity: 60 L Packaging instructions: 364 Passengers: Maximum quantity: 5 L Packaging instructions: 353 Special provision: A3		
14.7 Maritime transport in bulk according to IMO instruments	No data relevant		

SECTION 15: Regulatory information

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

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Product is classified in accordance with directive EC 1907/2006 and 1272/2008 and additional changes or national legislation Ur.l. RS 101/2002 and Ur.l.RS 16/2008.

Seveso Category - Directive 2012/18/EU: P5c-E2

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

Product

Point 3 - 40

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 \geq 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:

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.

15.2 Chemical safety assessment

No data available.

SECTION 16: Other information

Revision:

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Version 02 issued on September 2025 in accordance with EC No. 1907/2006 (Commission Regulation (EU) 2015/830) and EC No. 1272/2008.

In accordance to changes in COMMISSION REGULATION (EU) 2020/878 amending Annex II to Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH).

Legend of abbreviations:

ADR – European agreement concerning the international carriage of dangerous goods by road
CAS – Chemical Abstracts Service
CLP – Classification, Labeling and Packaging
CMR – Carcinogenic, Mutagenic or toxic for Reproduction
DNEL - Derived no-effect level
EC₅₀: Half maximal effective concentration
EmS – Emergency Schedule
GHS – Globally Harmonised System of Classification and Labeling of Chemicals
IATA – International Air Transport Association
IUCLID – International Uniform Chemical Information Database
IMDG – International Maritime Dangerous Goods Code
LC₅₀: Lethal concentration, 50%
LD₅₀: Median lethal dose; the dose causing 50% lethality
MARPOL – International convention for the prevention of pollution from ships
NOEC - No-observed-effect concentration
NOAEL – No-observed-adverse-effect level
NTP- National Toxicology Program
OEL - Occupational exposure limit
OECD - Organisation for Economic Co-operation and Development
PBT – Persistent Bioaccumulative Toxic
PNEC: Predicted no-effect concentration
Ppm – parts per million
REACH – Registration, Evaluation, Authorisation and Restriction of Chemicals
RTECS – The Registry of Toxic Effects of Chemical Substances
RID – Regulation concerning the international carriage of dangerous goods by rail
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

References:

- Safety data sheets of the substances for the product
- Regulation (EC) No. 1907/2006 of the European Parliament and of the Council of 18 December 2006 on registration, evaluation, authorization and limitation of chemicals (reach), the establishment of the European Chemicals Agency and the amendment of Directive 1999/45/EC and the repeal of the Council Regulation (EEC) No. Commission Regulation (EC) No 793/93 and Commission Regulation (EC) No. 1488/94 and Council Directives 76/769/EEC and Commission Directive 91/155/EEC, 93/105/EC in

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- Regulation (EC) No. 1272/2008 of the European Parliament and of the Council of 16 December 2008 on the classification, labeling and packaging of substances and mixtures, changes and repealing directives 67/548/EEC and 1999/45/EC and amendment of Regulation (EC) No 1095/2010. 1907/2006 - with changes and additions
- Chemicals Act /ZKO
- Waste Regulation (Official Gazette RS, Nos. 77/22 and 113/23)
- Packaging and waste packaging Regulation (Official Gazette RS, No. 54/21, 208/21, 44/22- ZVO-2 and 120/22)
- European Agreement on the transport of hazardous substances by road ADR
Decision on Annex A and B to the European Agreement on International Road Transport of Dangerous Goods /ADR /
- Dangerous Goods Regulations (DG) for the Air Transport (IATA)
- Rules for international maritime transport of dangerous goods (IMDG)
- Rules on the protection of workers from risks due to exposure to chemical substances at work (Official Gazette RS, No. 100/01, 39/05, 53/07, 102/10, 43/11- ZVZD-1, 38/15, 78/18 and 78/19, 72/21, 29/24)
- Regulation on the implementation of Regulation (EU) on Personal Protective Equipment (Official Gazette RS, No. 33/18)
- List of harmonized standards for personal protective equipment (C 412 / 11/11/2015, with all amendments and supplements) - Law on Safety and Health at Work (Official Gazette RS No. 43/2011)

Disclaimer of expressed and implied warranties:

The information contained in the safety data sheet have been translated from the manufacturer, revised in accordance with the Slovenian legislation. Guidelines for the safe use, handling, disposal, storage and transportation and cannot be used as a guarantee. The information relates only to the specific product and is not suitable for combining with other materials or for use in another process as described in the instructions.