

Safety Data Sheet

		Or repeated exposure <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>.
Hazardous to the aquatic environment – Chronic	Chronic Hazard, Category 2	H411 Toxic to aquatic life with long lasting effects.

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.
 H304 May be fatal if swallowed.
 H315 Skin corrosion/irritation
 H319 Extremely irritate eyes.
 H336 Can cause drowsiness and dizziness.
 H361d Suspected of damaging fertility.
 H373 May cause damage to organs <or state all organs affected, if known> through prolonged Or repeated exposure <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>.
 H411 Toxic to aquatic life with long lasting effects.

Precautionary statement:

Preventions:

P210 Keep away from heath/sparks/open flame/hot surface. No smoking.
 P233 Keep container tightly closed.
 P260 Avoid breathing dust / fume / gas / mist / vapors / spray.
 P264 Wash your hands thoroughly after handling.

Response:

P301 + P310: IF SWALLOWED: Immediately call a poison center or physician.

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P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and if you can do it without problems. Continue rinsing.

P331 Do not induce vomiting.

Disposal

P501 Dispose of contents/containers in accordance with local regulation

Component on the label:

Hydrocarbones C6-C7, isoalkanes, cyclical, < 5% n-hexane, toluene, n-hexane

2.3 Other hazards

PBT and vPvB evaluations are in section 12.5

SECTION 3: Composition / information on ingredients

3.1 Substance

See section 3.2

3.2 Mixture

Chemical name	CAS Nr. EC-Number INDEX number	%	Classification according to EC 1272/2008	
			Hazardous class/hazardous category	Hazardous phrases
Hydrocarbons C6-C7, isoalkanes, cyclical, < 5% n-hexane	/ 265-192-2 64742-89-8	30-50	Flam. Liq. 2 Asp. Tox. 1 Aquatic Chronic 2	H225 H304 H411
Ethyl acetate	607-022-00-5 205-500-4 141-78-6	30-50	Flam. Liq. 2 Eye irrit. 2 STOT SE 3	H225 H319 H336
Toluene	601-021-00-3 203-625-9 108-88-3	20-30	Flam. Liq. 2 Repr. 2 Asp. Tox. 1 STOT RE 2 * Skin Irrit. 2 STOT SE 3	H225 H361d *** H304 H373 ** H315 H336
n-hexane	601-037-00-0 203-777-6 110-54-3	1-3	Flam. Liq. 2 Repr. 2 Asp. Tox. 1 STOT RE 2 * Skin Irrit. 2 STOT SE 3 Aquatic Chronic 2	H225 H361f *** H304 H373 ** H315 H336 H411

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SECTION 4: First Aid Measures

4.1 Description of first aid measures

Inhalation:

Remove to fresh air, loosen tight clothing and, if necessary, call your doctor; the use of artificial respiration is not permitted to use mouth-to-mouth; if necessary, call your doctor. If dizziness, nausea, headache or weakness appeared seek for medical advice.

Skin contact:

Rinse skin with water and soap immediately. Remove contaminated clothing.

Eye contact:

Rinse with clear water or solution for rinsing eyes, holding the eyelids apart for at least 15 minutes. If symptoms persist, consult a doctor.

Ingestion:

Rinse the mouth and drink at least 100 mL. Call the doctor. Do not induce vomiting.

4.2 Most important symptoms and effects, both acute and delayed

Dizziness, sleekness, headache, vomiting, unconsciousness.

4.3 Indication of any immediate medical attention and special treatment needed

Specific treatment: First aid, decontamination, treatment of symptoms.

Notes for the doctor: Treat symptomatically.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable:

Foam, powder, carbon dioxide, inert gas or INERGEN FM 200 (for beginning of firefighting), water fog

Unsuitable:

Water jet, except water mist to cool containers with flammable products.

5.2 Special hazards arising from the substance or mixture

The preparation is combustible. Combustion products or gases may form explosive gas-air mixtures. In case of fire may liberate Carbone monoxide CO. Remove all possible sources of ignition: open flame, lit cigarette, sparks from tools and equipment. After using close the product.

5.3 Advice for firefighters

Special protective equipment for firefighters: Wear a self-contained breathing apparatus and chemical protective clothing. Collect contaminated water used for firefighting

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separately. Do not release it in sewage system.

Endangered drums or containers with hazardous substances must be cooled with water spray.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Wear protective clothing. With larger release, use respiratory protection. Eliminate sources of ignition and sparking. Ensure good ventilation.

6.2 Environmental precautions

Prevent release into the water and drains and the accumulation of vapors in closed rooms.

6.3 Methods and material for containment and cleaning up

Spilled liquid should be taken up through the absorbent (sand, soil, universal binder). Contaminated material should not be disposed of with household waste. Do not allow to enter sewer system. Throw off in an appropriate container. Packaging waste should be deferred in accordance with official regulations.

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

Avoid repeated contact with the skin, do not inhale vapor or haze. Ensure good ventilation of the places where the product is used. If you did not use the entire contents of the product, you should tightly close the container after work. Avoid contact with hot elements sparks, flame and sources of ignition. Avoid the possibility of electrostatic charge. When refilling larger quantities, ensure conductivity with the bonding and grounding of all equipment.

Do not eat, drink or smoke during work. Avoid inhaling the vapours. Close the product tightly after use. Wear protective gloves, glasses and clothing.

7.2 Conditions for safe storage, including any incompatibilities

Store in dry well-ventilated place and in tightly closed package, protected from sunlight, source of burning, heat and electrostatic charge. The floor in the warehouse needs to be solvent-resistant and impermeable. Avoid frost. Do not store together with food, beverages or fodder.

7.3. Specific end use(s)

Product is intended for use in dental laboratory.

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SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Directive 98/24/EC with all amendments

Official gazette RS, Št. 100/01, 39/05, 53/07, 102/10, 43/11 – ZVZD-1, 38/15, 78/18, 78/19; 72/21

Chemical name	OEL (mg/m3)	OEL (ml/m3, PPM)	Note
Ethyl acetate	1468	400	Y
Toluene	192	50	K EU BAT
N-hexane	72	20	BAT EU

BAT

Chemical name	Characteristical index Biological sample Time of the sampling (BAT)
Toluene	toluene blod after working 10,85 mmol/mol kreatinin* - last breath out air in the time of the exposure 0,83 mmol/l Hipuric acid urin after working 1,58 mol/mol kreatinin* o-krezol urin after working 1,58 mol/mol kreatinin*
N-hexane	N-hexane blood in the time of the exposure 1,74 mmol/l

DNEL

Chemical name	Population exposure effects value (unit)
Hydrocarbones C6-C7, isoalkanes, cyclical < 5% n-hexane	Workers long-term inhalation Systemic effect 5306 mg/m3 Workers long-term dermal sistemic effect 13964 mg/kg/ body weight/day Users long-term inhalation Systemic effect 1131 mg/m3 Users long-term dermain systemic effect 1377 mg/kg/body weight / day Users long-term oral systemic effect 1301 mg/kg/body weight / day
Toluene	Workers Long-term inhalation systemic effects 192 mg/m3 Workers long-term inhalation local effects 192 mg/m3 Users short term inhalaton systemic effects 226 mg/m3 Users short term inhalation local effects 226 mg/m3

PNEC

Chemical name	Details of the environment Values
Ethyl acetate	Fresh water 0,26 mg/l Sea water 0,026 mg/l Broken releases 1.65 mg / l Sediments in fresh water 1.25 mg / kg dry weight Sediment in seawater 0.125 mg / kg dry weight Earth 0.24 mg / kg dry weight Wastewater Treatment Plant (STP) 650 mg / l

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Toluene	Fresh water = 0.68 mg / l Seawater = 0.68 mg / l Broken releases = 0.68 mg / l Wastewater Treatment Plant (STP) = 13.61 mg / l Fresh water sediment = 16.39 mg / kg dry weight Sediment in seawater = 16.39 mg / kg dry weight Earth = 2.89 mg / kg dry weight
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8.2 Exposure controls

Personal protective equipment in accordance with Regulation (EU) 2016/425, with the Regulation on personal protective equipment (Ur. L. RS, no. 29/05, 23/06, 17/11 - ZTZPUS-1 and 76/11) and the List harmonized standards for OVO-2018 / C 209/03.

Personal protection

Respiratory protection:

Wear full face protection with "A" filter when used indoors for prolonged periods. If the oxygen concentration in the workplace air falls below 17%, use a self-contained open-circuit breathing apparatus.

Use respiratory mask according to SIST EN 136: 1998 / AC: 2004 Respiratory protection equipment - Gas filters and combi-filters in accordance with Official Journal EC C110 of 11 April 2014.

Eye protection:

Wear safety goggles at lower concentrations in the air and a full-face protective mask at higher concentrations.

Whenever a risk assessment indicates it is necessary to wear safety goggles that comply with an approved standard. If contact can occur, chemical safety goggles should be worn in accordance with SIST EN 166:2002 - Personal eye protection - Specifications and safety goggles design (TYPE 3) established in accordance with Official Journal EC C110 of 11 April 2014.

Recommended: goggles with side protection; the choice should be in line with the product application and be relevant to the risk assessment.

Hand protection:

Longer contact: > 8 hours (time to remove obstruction): Viton[®] (> 0.7 mm).

Shorter contact: <1 hour (barrier removal time): Chloroprene, Nitrile rubber (0.2 mm).

Please note that the breakthrough time of any glove material varies from manufacturer to manufacturer. In the case of multi-substance mixtures, it is impossible to accurately estimate the protection time with gloves.

Wear safety gloves in accordance with SIST EN 374-1: 2003 to SIST EN

374-4: 2014-Protective gloves against chemicals and micro-organisms according to EC Official Journal C110 of 11 April 2014.

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Skin protection:

Under normal conditions, wear cotton clothing and appropriate footwear. If the policy option is large, use clothing and footwear resistant to chemicals (PVC, rubber).

If there is a risk of ignition due to static electricity, wear antistatic protective clothing. Wear antistatic clothing made of natural fibers (cotton) or heat-resistant synthetic fibers for protection against static discharges. For further information on materials, purpose and test methods, see the European standard SIST EN 1149-5: 2008 / Protective clothing - Electrostatic properties according to EC Official Journal C110 of 11 April 2014. Choose the type of clothing according to the product application or product, according to the risk assessment.

8.3 Control of environment protection

Do not spill into inland water or sewage system. Avoid entering the soil.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state: liquid

It looks like: pure low-viscosity fluid

Color: Yellow-brown

Odor: After organic solvents

pH: No information available

Melting point / freezing point (° C): - 83,6 ° C; computational method, based on component data; ethyl acetate

Initial boiling point: 77 ° C; computational method, based on component data; ethyl acetate

Flash point: -12 ° C; computational method, based on component data; hydrocarbons, C6-C7, isoalkanes, cyclic, <5% n-hexane

Evaporation rate: 6.2 butyl acetate = 1 2.24 butyl acetate = 1; computational method, based on component data; toluene ethyl acetate

Lower explosion limit: 1.2 vol%

Explosive cap: 11.0% vol. Computational method, based on component data

Vapor pressure: (20°C) 30 hPa at 20 ° C toluene

Vapor density: 3.1 (air = 1) toluene

Relative density (kg / l): 0.87 ISO 2811

Water solubility: Insignificant; 0-1%

Partition coefficient: n-octanol / water: calculation method, based on component data

Auto-ignition temperature: 427 ° C; computational method, based on component data; ethyl acetate

Decomposition temperature: No information available

Explosive properties: Product is not explosive, but explosive mixtures, vapors or air may form.

Oxidizing properties: No information available

9.2 Other information

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Dry matter: (calculated %): 0.00
 Organic solvents (wt.%): 100.00
 Water content: (calculated %): 0.00

SECTION 10: Stability and reactivity

10.1 Reactivity

Not reactive under normal temperature and proper use.

10.2 Chemical stability

Stable at normal temperature. When used in accordance with the instructions is not degraded.

10.3 Possibility of hazardous reaction

When heated, the pressure and volatile solvents are increased, risk of ignition and explosion.

10.4 Conditions to avoid

High temperature, presence of ignition sources

10.5 Incompatible materials

Strong oxidizing agents

10.6 Hazardous decomposition products

Corrosive and irritating fumes, CO, CO₂

SECTION 11: Toxicological information

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

Acute toxicity:

Information for components:

Chemical name	LD50 inhalation	Oral LD50	Dermal LD50
Ethyl acetate	LC50-4 h mouse 1500 ppm	LD50 rat 5620 mg/kg	LD50 rabbit > 20 ml/kg
toluene	LC50-4 h rat 13 mg/l	LD50 rat 636 mg/kg	LD50 rabbit 8390 mg/kg
N-hexane	LC50-4 h rat 48000 ppm		LD50 rabbit 3000 mg/kg

Skin corrosion / irritation: Causes skin irritation. If skin irritation occurs: Get medical advice / attention. IF ON SKIN: Wash with plenty of soap and water.

Serious eye damage / irritation: Causes serious eye irritation. If eye irritation persists: Get medical attention / care.

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Respiratory or skin sensitization: No data available. The product does not contain components that would cause respiratory or skin sensitization.

Germ cell mutagenicity: No data available. The product does not contain any components that would cause genetic damage.

Carcinogenicity: No data available. The product does not contain any components known to cause carcinogens.

Reproductive toxicity: Suspected of damaging the unborn child. Obtain special instructions before use. Do not use until you are familiar with all safety precautions. IF exposed or suspected of exposure: Get medical attention / care. Use personal protective equipment as required.

STOT single exposure: May cause drowsiness or dizziness. Use only outdoors or in a well-ventilated area.

STOT-repeated exposure: May cause damage to organs through prolonged or repeated exposure. Get medical help / care if you feel unwell. Do not eat, drink or smoke while using this product.

Do not breathe dust / fumes / gas / mist / vapors / spray.

Aspiration hazard: May be fatal if swallowed and enters airways.

DO NOT induce vomiting. IF SWALLOWED: Immediately call a POISON CENTER or doctor / physician.

SECTION 12: Ecological information

12.1 Toxicity

Do not allow penetration of the product into the ground, spilling into water, sewage and groundwater. Avoid contact with surface water. Behavior in waste water plants: solvent is lighter than water, adhesive substance is deposited.

12.2 Persistence and degradability

No data available.

12.3 Bioaccumulative potential

No data available.

12.4 Mobility in soil

Possible splitting in the environment.

12.5 Results of PBT and vPvB assessment

No data available.

12.6 Endocrine disrupting properties

No data available.

12.7 Other adverse effect

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Ecotoxic – information for the components. Possibility of the long-term effect on the environment. The local Regulations should be considered.

SECTION 13: Disposal considerations

Directive 2008/98/EC

13.1 Waste treatment methods



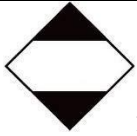
Methods of disposal: Remove disposal in accordance with local legislation.

Removing of residues: Separate residues. Because of pollution risk remove residues and disposal as industrial disposal or hazardous disposal in accordance with national legislation.

Contaminated packaging: Keep waste separate. Because of possible pollution remove as industrial waste or hazardous waste 08 01 11*

Classification number of the waste: 16 03 05* organic wastes containing dangerous substances.

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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. (ethyl acetate)		
14.3 Transport hazard class(es)			
Class	3		
Classification code	F1	/	/
Label	 		
Hazard identification	33		
Transport category (Tunnel restriction code)	2 (D/E)	/	/
Quantity	 for packaging: inside ≤ 5, outside ≤ 30 units		
EmS	F-E, S-E		
14.4 Packing group			
II			
14.5 Environmental hazards	Dangerous	Pollutant	Dangerous
14.6 Special precautions for user	Transportation in tightly sealed, stable container. Person for transportation has to be educated how to react in the case of an accident. Instructions for safety precautions and use: see sections 6-8.		
14.7 Maritime transport in bulk according to IMO instruments	No transportation in bulk.		

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.

15.2 Chemical safety assessment

No data available from component's supplier.

SECTION 16: Other information

Revision:

Version 08 issued on December 2022 in accordance with EC 1907/2006 (Commission Regulation (EU) 2015/830) and EC 1272/2008.

Revision 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

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

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

RID – Regulation concerning the international carriage of dangerous goods by rail

vPvB – very Persistent and very Bioaccumulative

References:

Safety data sheets of the substances for the product

Directive EC 1907/2006 and 1272/2008 with all amendments and implementations

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;

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Directive 2008/98/EC with all amendments, Official Gazette RS 37/15, 69/15.
Martindale: The Extra Pharmacopoeia, 13. edition
European convention about international transport of hazardous material ADR
- Dangerous Goods Regulations (DGR) for the air transport (IATA)
International Maritime Dangerous Goods Code IMDG

Disclaimer of expressed and implied warranties:

The information contained in the safety data sheet refer to the manufacturer's current knowledge and are a guideline for the safe use, handling, disposal, storage and transportation, but could not 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.