



A002 ALZN 600 Silver Aluzinc

Creation date	17th May 2023	Version	1
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SECTION 1: Identification of the substance/mixture and of the company/undertaking

- 1.1. Product identifier**
Substance / mixture A002 ALZN 600 Silver Aluzinc
mixture
UFI FH80-2095-E00T-A4Q0
- 1.2. Relevant identified uses of the substance or mixture and uses advised against**
Mixture's intended use
Fast-drying paint for various interior and exterior surfaces (spray).
Mixture uses advised against
The product should not be used in ways other than those referred in Section 1.
- 1.3. Details of the supplier of the safety data sheet**
Manufacturer
Name or trade name ECOCHEM S.C.
Address Warszawska 206, Częstochowa, 42-200
Poland
Phone +48 34 361 63 35
E-mail a.partyka@ecochemical.pl
- Competent person responsible for the safety data sheet**
Name ECOCHEM S.C.
E-mail a.partyka@ecochemical.pl
- 1.4. Emergency telephone number**
+48 34 361 63 35 (8-16)
European emergency number: 112

SECTION 2: Hazards identification

- 2.1. Classification of the substance or mixture**
Classification of the mixture in accordance with Regulation (EC) No 1272/2008
The mixture is classified as dangerous.
- Aerosol 1, H229, H222
Asp. Tox. 1, H304
Eye Irrit. 2, H319
STOT SE 3, H336
- Full text of all classifications and hazard statements is given in the section 16.
- Most serious adverse physico-chemical effects**
Pressurised container: May burst if heated. Extremely flammable aerosol.
- Most serious adverse effects on human health and the environment**
Causes serious eye irritation. May cause drowsiness or dizziness. May be fatal if swallowed and enters airways. Toxic to aquatic life with long lasting effects. No aspiration hazard labeling (Asp.Tox.1 - H304) is required when the product is placed on the market in aerosol containers.
- 2.2. Label elements**
Hazard pictogram
- 

- Signal word**
Danger
- Hazardous substances**
acetone

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Hazard statements

H222	Extremely flammable aerosol.
H229	Pressurised container: May burst if heated.
H319	Causes serious eye irritation.
H336	May cause drowsiness or dizziness.

Precautionary statements

P102	Keep out of reach of children.
P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P211	Do not spray on an open flame or other ignition source.
P251	Do not pierce or burn, even after use.
P261	Avoid breathing mist/vapours/spray.
P271	Use only outdoors or in a well-ventilated area.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P410+P412	Protect from sunlight. Do not expose to temperatures exceeding 50 °C.
P501	Dispose of contents/container to by handing over to the person authorized to dispose of waste or by returning to the supplier.

Supplemental information

EUH066 Repeated exposure may cause skin dryness or cracking.

2.3. Other hazards

The mixture does not contain substances with endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605. Mixture does not contain any substance meet the criteria for PBT or vPvB in accordance with Annex XIII of Regulation (EC) No. 1907/2006 (REACH) as amended. In use, may form flammable/explosive vapour-air mixture.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Mixture contains these hazardous substances and substances with the highest permissible concentration in the working environment

Identification numbers	Substance name	Content in % weight	Classification according to Regulation (EC) No 1272/2008	Note
Index: 606-001-00-8 CAS: 67-64-1 EC: 200-662-2 Registration number: 01-2119471330-49	acetone	35-45	Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE 3, H336 Specific concentration limit: Eye Irrit. 2, H319: C ≥ 10 % STOT SE 3, H336: C ≥ 20 %	6
Index: 649-202-00-6 CAS: 68476-85-7 EC: 270-704-2	petroleum gases, liquefied	35-45	Press. Gas, Flam. Gas 1, H220	2, 4, 5, 8
Index: 601-022-00-9 CAS: 1330-20-7 EC: 215-535-7 Registration number: 01-2119488216-32	xylene	<10	Flam. Liq. 3, H226 Asp. Tox. 1, H304 Acute Tox. 4, H312+H332 Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335	1, 6
Index: 607-025-00-1 CAS: 123-86-4 EC: 204-658-1 Registration number: 01-2119485493-29	n-butyl acetate	5-10	Flam. Liq. 3, H226 STOT SE 3, H336	6
Index: 601-023-00-4 CAS: 100-41-4 EC: 202-849-4	ethylbenzene	<5	Flam. Liq. 2, H225 Asp. Tox. 1, H304 Acute Tox. 4, H332 STOT RE 2, H373 (hearing organs)	6

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legal basis:
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Identification numbers	Substance name	Content in % weight	Classification according to Regulation (EC) No 1272/2008	Note
Index: 013-002-00-1 CAS: 7429-90-5 EC: 231-072-3	aluminium powder (stabilised)	2-8	Flam. Sol. 1, H228 Water-react. 2, H261	3
CAS: 64742-48-9 EC: 918-481-9 Registration number: 01-2119457273-39	hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < 2% aromatics	<2	Asp. Tox. 1, H304 EUH066	
Index: 649-356-00-4 CAS: 64742-95-6 EC: 918-668-5 Registration number: 01-2119455851-35	solvent naphtha (petroleum), light arom.	<2	Flam. Liq. 3, H226 Asp. Tox. 1, H304 STOT SE 3, H336, H335 Aquatic Chronic 2, H411	
Index: 601-021-00-3 CAS: 108-88-3 EC: 203-625-9 Registration number: 01-2119471310-51	toluene	<0,1	Flam. Liq. 2, H225 Asp. Tox. 1, H304 Skin Irrit. 2, H315 STOT SE 3, H336 Repr. 2, H361d STOT RE 2 (**), H373	6, 7

Notes

** another exposure route cannot be ruled out

- Note C: Some organic substances may be marketed either in a specific isomeric form or as a mixture of several isomers. In this case the supplier must state on the label whether the substance is a specific isomer or a mixture of isomers.
- Note S: This substance may not require a label according to Article 17 (see Section 1.3 of Annex I) (Table 3).
- Note T: This substance may be marketed in a form which does not have the physical hazards as indicated by the classification in the entry in Part 3. If the results of the relevant method or methods in accordance with Part 2 of Annex I of this Regulation show that the specific form of substance marketed does not exhibit this physical property or these physical hazards, the substance shall be classified in accordance with the result or results of this test or these tests. Relevant information, including reference to the relevant test method (s) shall be included in the safety data sheet.
- Note U (Table 3): When put on the market gases have to be classified as "Gases under pressure", in one of the groups compressed gas, liquefied gas, refrigerated liquefied gas or dissolved gas. The group depends on the physical state in which the gas is packaged and therefore has to be assigned case by case. The following codes are assigned:

Press. Gas (Comp.)
Press. Gas (Liq.)
Press. Gas (Ref. Liq.)
Press. Gas (Diss.)

Aerosols shall not be classified as gases under pressure (See Annex I, Part 2, Section 2.3.2.1, Note 2).

- Note K: The harmonised classification as a carcinogen or mutagen applies unless it can be shown that the substance contains less than 0,1 % w/w 1,3- butadiene (Einecs No 203-450-8), in which case a classification in accordance with Title II of this Regulation shall be performed also for those hazard classes. Where the substance is not classified as a carcinogen or mutagen, at least the precautionary statements (P102)-P210-P403 shall apply.
- A substance for which exposure limits are set.
- The use of the substance is restricted by Annex XVII of REACH Regulation
- Fulfilled Note K

Full text of all classifications and hazard statements is given in the section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

Do not perform artificial respiration without self-protection (e.g. a mask). If any health problems are manifested or if in doubt, inform a doctor and show him information from this safety data sheet.

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If inhaled

Terminate the exposure immediately; move the affected person to fresh air. Take care of your own safety, do not let the affected person walk! Beware of the contaminated clothes. Depending on the situation, call the medical rescue service and ensure medical treatment considering the frequent need of further observation for at least 24 hours.

If on skin

Remove contaminated clothes. Wash the affected area with plenty of water, lukewarm if possible.

If in eyes

Rinse eyes immediately with a flow of running water, open the eyelids (also using force if needed); remove contact lenses immediately if worn by the affected person. Rinsing should continue at least for 10 minutes. Provide medical treatment, specialized if possible.

If swallowed

Not considered as a potential route of exposure. DO NOT INDUCE VOMITING - even the inducing of vomiting by itself may cause complications (i.e. inhalation of the substance in airways and lungs).

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

If inhaled

Excessive exposure to vapors may cause respiratory irritation. Cough, headache. May cause drowsiness or dizziness.

If on skin

Possible irritation. Repeated exposure may cause skin dryness or cracking.

If in eyes

Causes serious eye irritation.

If swallowed

Irritation, nausea. May cause lung damage (chemical pneumonia) if swallowed.

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

Symptomatic treatment.

More information

Other relevant information is not available.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Alcohol-resistant foam, carbon dioxide, powder, water spray jet, water mist.

Unsuitable extinguishing media

Water jet.

5.2. Special hazards arising from the substance or mixture

Danger of bursting (explosion) when heated. In the event of fire, carbon monoxide, carbon dioxide and other toxic gases may arise. Inhalation of hazardous degradation (pyrolysis) products may cause serious health damage.

5.3. Advice for firefighters

Self-Contained Breathing Apparatus (SCBA) with a chemical protection suit only where personal (close) contact is likely. Use a self-contained breathing apparatus and full-body protective clothing. Closed containers with the product near the fire should be cooled with water. Do not allow run-off of contaminated fire extinguishing material to enter drains or surface and ground water.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Provide sufficient ventilation. Pressurised container: May burst if heated. Extremely flammable aerosol. Remove all ignition sources. Use personal protective equipment for work. Follow the instructions in the Sections 7 and 8. Do not inhale aerosols. Prevent contact with skin and eyes.

6.2. Environmental precautions

Prevent contamination of the soil and entering surface or ground water. Do not allow to enter drains.

6.3. Methods and material for containment and cleaning up

Spilled product should be covered with suitable (non-flammable) absorbing material (sand, diatomaceous earth, earth and other suitable absorption materials); to be contained in well closed containers and removed as per the Section 13. In the event of leakage of the substantial amount of the product, inform fire brigade and other competent bodies. After removal of the product, wash the contaminated site with plenty of water. Do not use solvents.

6.4. Reference to other sections

See the Section 7, 8 and 13.

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SECTION 7: Handling and storage

7.1. Precautions for safe handling

Prevent formation of gases and vapours in flammable or explosive concentrations and concentrations exceeding the occupational exposure limits. The product should be used only in the areas where it is not in contact with open fire and other ignition sources. Use non-sparking tools. Use of antistatic clothes and footwear is recommended. Do not inhale aerosols. Prevent contact with skin and eyes. No smoking. Protect against direct sunlight. Do not pierce or burn, even after use. Wash hands and exposed parts of the body thoroughly after handling. Do not spray on an open flame or other ignition source. Use only outdoors or in a well-ventilated area. Use personal protective equipment as per Section 8. Observe valid legal regulations on safety and health protection.

7.2. Conditions for safe storage, including any incompatibilities

Do not store with combustants, self-flammable or self-heating substances, organic peroxides, oxidising agents, pyrophoric solids or liquids and explosives. Store in tightly closed containers in cold, dry and well ventilated areas designated for this purpose. Store locked up. Protect from sunlight. Keep container tightly closed. Do not expose to temperatures exceeding 50 °C.

7.3. Specific end use(s)

Apart from the already mentioned guidelines, it is not necessary to follow any specific recommendations for the use of this product.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

The mixture contains substances for which occupational exposure limits are set.

European Union

Commission Directive 2000/39/EC

Substance name (component)	Type	Value	Note
acetone (CAS: 67-64-1)	OEL 8 hours	1210 mg/m ³	
	OEL 8 hours	500 ppm	
xylene (CAS: 1330-20-7)	OEL 8 hours	221 mg/m ³	Skin
	OEL 8 hours	50 ppm	
	OEL 15 minutes	442 mg/m ³	
	OEL 15 minutes	100 ppm	
n-butyl acetate (CAS: 123-86-4)	OEL 8 hours	241 mg/m ³	
	OEL 8 hours	50 ppm	
	OEL 15 minutes	723 mg/m ³	
	OEL 15 minutes	150 ppm	
ethylbenzene (CAS: 100-41-4)	OEL 8 hours	442 mg/m ³	Skin
	OEL 8 hours	100 ppm	
	OEL 15 minutes	884 mg/m ³	
	OEL 15 minutes	200 ppm	

European Union

Commission Directive 2006/15/EC

Substance name (component)	Type	Value	Note
toluene (CAS: 108-88-3)	OEL 8 hours	192 mg/m ³	Skin
	OEL 8 hours	50 ppm	
	OEL 15 minutes	384 mg/m ³	
	OEL 15 minutes	100 ppm	

DNEL

acetone

Workers / consumers	Route of exposure	Value	Effect	Value determination	Source
Workers	Dermal	186 mg/kg	Chronic effects systemic		
Workers	Inhalation	1210 mg/m ³	Chronic effects systemic		
Consumers	Inhalation	200 mg/m ³	Chronic effects systemic		
Consumers	Dermal	62 mg/kg	Chronic effects systemic		

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acetone

Workers / consumers	Route of exposure	Value	Effect	Value determination	Source
Consumers	Oral	62 mg/kg	Chronic effects systemic		
Workers	Inhalation	2420 mg/m ³	Acute effects local		

aluminium powder (stabilised)

Workers / consumers	Route of exposure	Value	Effect	Value determination	Source
Workers	Inhalation	3.72 mg/m ³	Chronic effects local		
Consumers	Oral	3.95 mg/kg	Chronic effects systemic		

hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < 2% aromatics

Workers / consumers	Route of exposure	Value	Effect	Value determination	Source
Workers	Dermal	208 mg/kg bw/day	Chronic effects systemic		
Consumers	Dermal	125 mg/kg bw/day	Chronic effects systemic		
Workers	Inhalation	871 mg/m ³	Chronic effects systemic		
Consumers	Inhalation	900 mg/m ³	Chronic effects systemic		
Consumers	Oral	125 mg/kg bw/day	Chronic effects systemic		

n-butyl acetate

Workers / consumers	Route of exposure	Value	Effect	Value determination	Source
Workers	Dermal	7 mg/kg bw/day	Chronic effects systemic		
Workers	Inhalation	48 mg/m ³	Chronic effects systemic		
Consumers	Dermal	3.4 mg/kg bw/day	Chronic effects systemic		
Consumers	Inhalation	12 mg/m ³	Chronic effects systemic		
Consumers	Oral	3.4 mg/kg bw/day	Chronic effects systemic		

solvent naphtha (petroleum), light arom.

Workers / consumers	Route of exposure	Value	Effect	Value determination	Source
Workers (0)	Dermal	25 mg/kg	Chronic effects systemic		
Workers (0)	Inhalation	150 mg/m ³	Chronic effects systemic		
Consumers (0)	Inhalation	32 mg/m ³	Chronic effects systemic		
Consumers (0)	Dermal	11 mg/kg	Chronic effects systemic		
Consumers (0)	Oral	11 mg/kg	Chronic effects systemic		

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toluene

Workers / consumers	Route of exposure	Value	Effect	Value determination	Source
Workers	Inhalation	384 mg/m ³	Acute effects systemic		
Workers	Inhalation	384 mg/m ³	Acute effects local		
Workers	Inhalation	192 mg/m ³	Chronic effects local		
Workers	Inhalation	192 mg/m ³	Chronic effects systemic		
Consumers	Inhalation	226 mg/m ³	Acute effects systemic		
Consumers	Inhalation	226 mg/m ³	Acute effects local		
Consumers	Inhalation	56.5 mg/m ³	Chronic effects local		
Consumers	Inhalation	56.5 mg/m ³	Chronic effects systemic		
Workers	Dermal	384 mg/kg	Chronic effects systemic		
Consumers	Dermal	226 mg/kg	Chronic effects systemic		
Consumers	Oral	8.13 mg/kg	Chronic effects systemic		

xylene

Workers / consumers	Route of exposure	Value	Effect	Value determination	Source
Workers	Inhalation	442 mg/m ³	Acute effects systemic		
Workers	Inhalation	442 mg/m ³	Acute effects local		
Workers	Inhalation	221 mg/m ³	Chronic effects systemic		
Workers	Inhalation	221 mg/m ³	Chronic effects local		
Workers	Dermal	212 mg/kg	Chronic effects systemic		
Consumers	Inhalation	260 mg/m ³	Acute effects systemic		
Consumers	Inhalation	260 mg/m ³	Acute effects local		
Workers	Inhalation	65.3 mg/m ³	Chronic effects systemic		
Workers	Inhalation	65.3 mg/m ³	Chronic effects local		
Consumers	Dermal	125 mg/kg	Chronic effects systemic		
Consumers	Oral	12.5 mg/kg	Chronic effects systemic		

PNEC

acetone

Route of exposure	Value	Value determination	Source
Microorganisms in sewage treatment	100 mg/l		
Drinking water	10.6 mg/l		
Marine water	1.06 mg/l		
Water (intermittent release)	21 mg/l		
Soil (agricultural)	29.5 mg/kg		
Freshwater sediment	30.4 mg/kg		
Sea sediments	3.04 mg/kg		

aluminium powder (stabilised)

Route of exposure	Value	Value determination	Source
Microorganisms in sewage treatment	20 mg/l		

n-butyl acetate

Route of exposure	Value	Value determination	Source
Drinking water	0.18 mg/l		
Marine water	0.018 mg/l		
Water (intermittent release)	0.36 mg/l		

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n-butyl acetate

Route of exposure	Value	Value determination	Source
Microorganisms in sewage treatment	35.6 mg/l		
Freshwater sediment	0.981 mg/kg		
Sea sediments	0.0981 mg/kg		

xylene

Route of exposure	Value	Value determination	Source
Drinking water	0.327 mg/l		
Marine water	0.327 mg/l		
Water (intermittent release)	0.327 mg/l		
Soil (agricultural)	2.31 mg/kg		
Freshwater sediment	12.46 mg/kg		
Sea sediments	12.46 mg/kg		

8.2. Exposure controls

Follow the usual measures intended for health protection at work and especially for good ventilation. This can be achieved only by local suction or efficient general ventilation. Ensure workplace is equipped with a safety shower and eye wash station. If exposure limits cannot be observed in this mode, suitable protection of airways must be used. Do not eat, drink and smoke during work. Wash your hands thoroughly with water and soap after work and before breaks for a meal and rest.

Eye/face protection

Protective goggles or face shield (based on the nature of the work performed) according to EN 166

Skin protection

Hand protection: Protective gloves product resistant in accordance with EN ISO 374-1. Recommended material: butyl rubber (IIR) permeation 2 (>30min) for short term contact. Permeation 6 (>480min) in case of prolonged contact. When choosing appropriate thickness, material and permeability of the gloves, observe recommendations of their particular manufacturer. Other protection: protective work- and footwear, according to EN 344. Contaminated skin should be washed thoroughly.

Respiratory protection

Under normal conditions of use, it is not required. Mask with a filter against organic vapors AX/PX in an environment with difficult ventilation. Respirator for high concentrations or prolonged exposure.

Thermal hazard

Flammable product, avoid contact with hot surfaces, sources of fire and high temperatures.

Environmental exposure controls

Observe usual measures for protection of the environment, see Section 6.2. Collect spillage.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	liquid
Colour	silver
Odour	characteristic
Melting point/freezing point	not determined
Boiling point or initial boiling point and boiling range	not determined
Flammability	extremely flammable
Lower and upper explosion limit	
bottom	1,9 %
upper	9 %
Flash point	not determined
Auto-ignition temperature	not determined
Decomposition temperature	not determined
pH	non-soluble (in water)
Kinematic viscosity	not applicable
Solubility in water	insoluble

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Partition coefficient n-octanol/water (log value)	not determined
Vapour pressure	not determined
Density and/or relative density	
Density	0,85-0,9 g/cm ³ at 20 °C
Relative vapour density	not determined
Particle characteristics	not applicable
9.2. Other information	
Explosive properties	Vapours mixed up with air can be explosive.
none	

SECTION 10: Stability and reactivity

10.1. Reactivity

When used in the standard way, there is not any dangerous reaction with other substances.

10.2. Chemical stability

The product is stable under normal conditions.

10.3. Possibility of hazardous reactions

Contact with sources of ignition makes product set on fire.

10.4. Conditions to avoid

Keep away from flames, sparks, overheating and other sources of ignition. The product is stable and no degradation occurs under normal use. Pressurised container: May burst if heated.

10.5. Incompatible materials

Protect against strong acids, bases and oxidizing agents.

10.6. Hazardous decomposition products

Not developed under normal uses. Dangerous outcomes such as carbon monoxide and carbon dioxide are formed at high temperature and in fire.

SECTION 11: Toxicological information

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

Inhalation of solvent vapors above values exceeding exposure limits for working environment may result in acute inhalation poisoning, depending on the level of concentration and exposure time. No toxicological data is available for the mixture. No toxicological effects are expected if occupational exposure limits are not exceeded.

Acute toxicity

Based on available data the classification criteria are not met.

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Route of exposure	Parameter	Method	Value	Exposure time	Species	Sex	Value determination	Source
Dermal	ATE		12220 mg/kg				Calculation of value	
Inhalation (vapor)	ATE		95.41 mg/l				Calculation of value	

acetone

Route of exposure	Parameter	Method	Value	Exposure time	Species	Sex	Value determination	Source
Oral	LD ₅₀		5800 mg/kg		Rat			
Dermal	LD ₅₀		7624 mg/kg		Rabbit			
Inhalation	LC ₅₀		76 mg/l	4 hours	Rat			

ethylbenzene

Route of exposure	Parameter	Method	Value	Exposure time	Species	Sex	Value determination	Source
Oral	LD ₅₀		3500 mg/kg		Rat			
Dermal	LD ₅₀		17800 mg/kg		Rat			
Dermal	LD ₅₀		15433 mg/kg		Rabbit			
Inhalation (vapor)	LC ₅₀		17.4 mg/l	4 hours	Rat			
Oral	LD ₅₀		4769 mg/kg		Rat			

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ethylbenzene

Route of exposure	Parameter	Method	Value	Exposure time	Species	Sex	Value determination	Source
Inhalation (vapor)	LC ₅₀		17400 mg/kg	4 hours	Rat			

hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < 2% aromatics

Route of exposure	Parameter	Method	Value	Exposure time	Species	Sex	Value determination	Source
Oral	LD ₅₀	OECD 401	>5000 mg/kg		Rat			
Dermal	LD ₅₀	OECD 402	>5000 mg/kg		Rabbit			
Inhalation	LC ₅₀	OECD 403	>5000 mg/m ³					
Inhalation	LC ₅₀	OECD 403	>4951 mg/m ³					

n-butyl acetate

Route of exposure	Parameter	Method	Value	Exposure time	Species	Sex	Value determination	Source
Oral	LD ₅₀		>5000 mg/kg		Rat			
Dermal	LD ₅₀		>5000 mg/kg		Rabbit			
Inhalation	LC ₅₀		23.4 mg/l	4 hours	Rat			

petroleum gases, liquefied

Route of exposure	Parameter	Method	Value	Exposure time	Species	Sex	Value determination	Source
Inhalation	LC ₅₀		658 mg/l	4 hours	Rat		Literary studies	butan
Inhalation	LC ₅₀		276000 ppm	4 hours	Rat		Literary studies	butan

toluene

Route of exposure	Parameter	Method	Value	Exposure time	Species	Sex	Value determination	Source
Oral	LD ₅₀		5580 mg/kg		Rat			
Dermal	LD ₅₀		12124 mg/kg		Rat			
Inhalation	LD ₅₀		28.1 mg/l	48 hours	Rat			

xylene

Route of exposure	Parameter	Method	Value	Exposure time	Species	Sex	Value determination	Source
Oral	LD ₅₀		2100 mg/kg		Rat			
Dermal	LD ₅₀		1100 mg/kg		Rat			
Inhalation	LC ₅₀		11 mg/l	4 hours				

Skin corrosion/irritation

Based on available data the classification criteria are not met.

ethylbenzene

Route of exposure	Result	Exposure time	Species
	Slightly irritating		Rabbit

Serious eye damage/irritation

Causes serious eye irritation.

ethylbenzene

Route of exposure	Result	Exposure time	Species
	Irritating		Rabbit

Respiratory or skin sensitisation

Based on available data the classification criteria are not met.

ethylbenzene

Route of exposure	Result	Exposure time	Species	Sex
	Not sensitizing		Human	

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Germ cell mutagenicity

Based on available data the classification criteria are not met.

Carcinogenicity

Based on available data the classification criteria are not met.

Reproductive toxicity

Based on available data the classification criteria are not met.

ethylbenzene

Effect	Parameter	Value	Result	Species	Sex
	NOAEL	4.3 mg/l	Indeterminate	Rat	

Toxicity for specific target organ - single exposure

May cause drowsiness or dizziness.

ethylbenzene

Route of exposure	Parameter	Value	Specific target organ	Result	Species	Sex
Inhalation	NOAEL		Nervous system	Drowsiness, Dizziness	Human	

Toxicity for specific target organ - repeated exposure

Based on available data the classification criteria are not met.

ethylbenzene

Route of exposure	Parameter	Value	Exposure time	Specific target organ	Result	Species	Sex
Inhalation	NOAEL	1.1 mg/l		Kidney	Indeterminate	Rat	
Inhalation	NOAEL	1.1 mg/l	103 weeks	Liver	Indeterminate	Mouse	
Inhalation	NOAEL	3.4 mg/l	28 days	Bone marrow	Indeterminate	Rat	
Inhalation	NOAEL	2.4 mg/l	5 days		Indeterminate	Rat	
Inhalation	NOAEL	3.3 mg/l	103 weeks	Endocrine system	Indeterminate	Mouse	

Aspiration hazard

May be fatal if swallowed and enters airways.

11.2. Information on other hazards

The mixture does not contain substances with endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605.

SECTION 12: Ecological information

12.1. Toxicity

Acute toxicity

Toxic to aquatic life with long lasting effects.

acetone

Parameter	Value	Exposure time	Species	Environment	Value determination
EC ₅₀	23.5 mg/l	48 hours	Daphnia (Daphnia magna)		
LC ₅₀	5540 mg/l	96 hours	Fish (Oncorhynchus mykiss)		
EC ₅₀	3400 mg/l	72 hours	Algae (Chlorella pyrenoidosa)		

ethylbenzene

Parameter	Value	Exposure time	Species	Environment	Value determination
EC ₅₀	0.96 mg/l		Crustaceans (Daphnia magna)		
EC ₅₀	1.81 mg/l	48 hours	Daphnia		Experimentally
IC ₅₀	3.6 mg/l	72 hours	Algae		Experimentally
LC ₅₀	4.2 mg/l	96 hours	Fish		Experimentally

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hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < 2% aromatics

Parameter	Value	Exposure time	Species	Environment	Value determination
LL ₅₀	2200 mg/l	96 hours	Fish (Pimephales promelas)		
LL ₅₀	3.6 mg/l	96 hours	Fish (Oncorhynchus mykiss)		
LC ₅₀	>1000 mg/l	96 hours	Fish (Oncorhynchus mykiss)		
EC ₅₀	1000 mg/l	48 hours	Daphnia (Daphnia magna)		
EC ₅₀	>1000 mg/l	72 hours	Algae (Pseudokirchneriella subcapitata)		

n-butyl acetate

Parameter	Value	Exposure time	Species	Environment	Value determination
ErC ₅₀	647.7 mg/l	72 hours	Algae (Desmodesmus subspicatus)		
LC ₅₀	18 mg/l	96 hours	Fish (Pimephales promelas)		
EC ₅₀	44 mg/l	48 hours	Invertebrates (Daphnia sp.)		
NOEC	200 mg/l	72 hours	Algae (Desmodesmus subspicatus)		
IC ₅₀	356 mg/l	40 hours	Microorganisms (Tetrahymena pyriformis)	Activated sludge	

solvent naphtha (petroleum), light arom.

Parameter	Value	Exposure time	Species	Environment	Value determination
LC ₅₀	1-10 mg/kg	96 hours	Fish		
EC ₅₀	1-10 mg/kg	48 hours	Crustaceans		
EC ₅₀	1-10 mg/kg	72 hours	Algae		

toluene

Parameter	Value	Exposure time	Species	Environment	Value determination
LC ₅₀	13 mg/l	96 hours	Fish (Carassius auratus)		
EC ₅₀	11.5 mg/l	48 hours	Crustaceans (Daphnia magna)		
EC ₅₀	125 mg/l	48 hours	Algae (Scenedesmus subspicatus)		

xylene

Parameter	Value	Exposure time	Species	Environment	Value determination
LC ₅₀	13.5 mg/l	96 hours	Fish (Oncorhynchus mykiss)		
EC ₅₀	3.4 mg/l	48 hours	Daphnia (Ceriodaphnia dubia)		
EC ₅₀	10 mg/l	72 hours	Algae and other aquatic plants (Skeletonema costatum)		

Chronic toxicity

hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < 2% aromatics

Parameter	Value	Exposure time	Species	Environment
NOELR	0.0132 mg/l	28 days	Fish	

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12.2. Persistence and degradability

Biodegradability

acetone

Parameter	Value	Exposure time	Environment	Result	Source
	96 %	28 days			

n-butyl acetate

Parameter	Value	Exposure time	Environment	Result	Source
	83 %	28 days		Easily biodegradable	

petroleum gases, liquefied

Parameter	Value	Exposure time	Environment	Result	Source
				Easily biodegradable	butan

toluene

Parameter	Value	Exposure time	Environment	Result	Source
	100 %	14 days			

xylene

Parameter	Value	Exposure time	Environment	Result	Source
	88 %	28 days			

There are no ecotoxicological data available for the product.

12.3. Bioaccumulative potential

acetone

Parameter	Value	Exposure time	Species	Environment	Temperature [°C]	Value determination	Source
BCF	1						
Log Pow	-0.24						

n-butyl acetate

Parameter	Value	Exposure time	Species	Environment	Temperature [°C]	Value determination	Source
Log Kow	2.3						
BCF	15					Estimated value	

petroleum gases, liquefied

Parameter	Value	Exposure time	Species	Environment	Temperature [°C]	Value determination	Source
BCF	33						butan
Log Pow	2.89						butan
Log Kow	<4						butan

toluene

Parameter	Value	Exposure time	Species	Environment	Temperature [°C]	Value determination	Source
BCF	13						
Log Pow	2.73						

xylene

Parameter	Value	Exposure time	Species	Environment	Temperature [°C]	Value determination	Source
BCF	9						
Log Pow	2.77						

No accumulation potential

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12.4. Mobility in soil

acetone

Parameter	Value	Environment	Temperature	Source
Koc	1			

n-butyl acetate

Parameter	Value	Environment	Temperature	Source
Log Koc	1.27			

petroleum gases, liquefied

Parameter	Value	Environment	Temperature	Source
Koc	900			butan
Napięcie powierzchniowe (N/m)	<0.10		0°C	butan

xylene

Parameter	Value	Environment	Temperature	Source
Koc	202			

Does not dissolve in water. The preparation is lighter than water and stays on the surface. The gaseous components quickly disperse in the air.

12.5. Results of PBT and vPvB assessment

Product does not contain any substance meeting the criteria for PBT or vPvB in accordance with the Annex XIII of Regulation (EC) No 1907/2006 (REACH) as amended.

12.6. Endocrine disrupting properties

The mixture does not contain substances with endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605.

12.7. Other adverse effects

The mixture is not classified as hazardous to the ozone layer. The possibility of other harmful effects of the individual components of the mixture on the environment (e.g. impact on the increase of global warming) should be considered.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Hazard of environmental contamination; dispose of the waste in accordance with the local and/or national regulations. Proceed in accordance with valid regulations on waste disposal. Any unused product and contaminated packaging should be put in labelled containers for waste collection and submitted for disposal to a person authorised for waste removal (a specialised company) that is entitled for such activity. Do not empty unused product in drainage systems. The product must not be disposed of with municipal waste. Empty containers may be used at waste incinerators to produce energy or deposited in a dump with appropriate classification. Perfectly cleaned containers can be submitted for recycling.

Waste management legislation

Directive 2008/98/EC of the European Parliament and of the Council of 19 November 2008 on waste, as amended. Decision 2000/532/EC establishing a list of wastes, as amended.

15 01 05 composite packaging

Packaging waste type code

20 01 01 paper and cardboard

20 01 39 Plastics

SECTION 14: Transport information

14.1. UN number or ID number

UN 1950

14.2. UN proper shipping name

AEROSOLS

14.3. Transport hazard class(es)

2 Gases

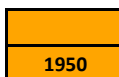
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- 14.4. Packing group**
not relevant
- 14.5. Environmental hazards**
not relevant
- 14.6. Special precautions for user**
Reference in the Sections 4 to 8.
- 14.7. Maritime transport in bulk according to IMO instruments**
not relevant

Additional information

Hazard identification No.



UN number

5F

Classification code

2.1

Safety signs

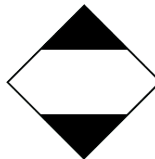


Road transport - ADR

Limited quantities

1 L

Sign



Air transport - ICAO/IATA

Packaging instructions passenger

203

Cargo packaging instructions

203

Marine transport - IMDG

EmS (emergency plan)

F-D, S-U

MFAG

620

SECTION 15: Regulatory information

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

Regulation (EC) No. 1907/2006 of the European Parliament and of the Council of 18th December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing the European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No. 793/93 and Commission Regulation (EC) No. 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, as amended. REGULATION (EC) No. 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL as amended. Product contains reportable explosives precursors: Reporting of suspicious transactions, disappearances and thefts according to Regulation (EU) 2019/1148, Article 9. Commission Regulation (EU) 2020/878 of 18 June 2020 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).

15.2. Chemical safety assessment

For mixtures, a chemical safety assessment is not required.

More information

Seveso Directive 2012/18/EU (Seveso III): P3a FLAMMABLE AEROSOLS

SECTION 16: Other information

A list of standard risk phrases used in the safety data sheet

H220	Extremely flammable gas.
H222	Extremely flammable aerosol.

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H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H228	Flammable solid.
H229	Pressurised container: May burst if heated.
H261	In contact with water releases flammable gases.

H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H361d	Suspected of damaging the unborn child.
H373	May cause damage to organs through prolonged or repeated exposure.
H373	May cause damage to hearing organs through prolonged or repeated exposure.
H411	Toxic to aquatic life with long lasting effects.
H312+H332	Harmful in contact with skin or if inhaled.

Guidelines for safe handling used in the safety data sheet

P102	Keep out of reach of children.
P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P211	Do not spray on an open flame or other ignition source.
P251	Do not pierce or burn, even after use.
P261	Avoid breathing mist/vapours/spray.
P271	Use only outdoors or in a well-ventilated area.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P410+P412	Protect from sunlight. Do not expose to temperatures exceeding 50 °C.
P501	Dispose of contents/container to by handing over to the person authorized to dispose of waste or by returning to the supplier.

A list of additional standard phrases used in the safety data sheet

EUH066	Repeated exposure may cause skin dryness or cracking.
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Other important information about human health protection

The product must not be - unless specifically approved by the manufacturer/importer - used for purposes other than as per the Section 1. The user is responsible for adherence to all related health protection regulations.

Key to abbreviations and acronyms used in the safety data sheet

ADR	European agreement concerning the international carriage of dangerous goods by road
BCF	Bioconcentration Factor
CAS	Chemical Abstracts Service
CLP	Regulation (EC) No 1272/2008 on classification, labelling and packaging of substance and mixtures
EC	Identification code for each substance listed in EINECS
EC ₅₀	Concentration of a substance when it is affected 50% of the population
EINECS	European Inventory of Existing Commercial Chemical Substances
EmS	Emergency plan
EU	European Union
EuPCS	European Product Categorisation System
IATA	International Air Transport Association
IBC	International Code For The Construction And Equipment of Ships Carrying Dangerous Chemicals
IC ₅₀	Concentration causing 50% blockade
ICAO	International Civil Aviation Organization
IMDG	International Maritime Dangerous Goods
IMO	International Maritime Organization
INCI	International Nomenclature of Cosmetic Ingredients
ISO	International Organization for Standardization

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IUPAC	International Union of Pure and Applied Chemistry
LC ₅₀	Lethal concentration of a substance in which it can be expected death of 50% of the population
LD ₅₀	Lethal dose of a substance in which it can be expected death of 50% of the population
LL ₅₀	Lethal Loading for 50% of tested organisms
log Kow	Octanol-water partition coefficient
NOAEL	No observed adverse effect level
NOEC	No observed effect concentration
NOEL	No observed effect level
NOELR	No Observed Effect Loading Rate
OEL	Occupational Exposure Limits
PBT	Persistent, Bioaccumulative and Toxic
ppm	Parts per million
Press. Gas (Comp.)	Gas under pressure: compressed gas
Press. Gas (Diss.)	Gas under pressure: dissolved gas
Press. Gas (Liq.)	Gas under pressure: liquefied gas
Press. Gas (Ref. Liq.)	Gas under pressure: refrigerated liquefied gas
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals
RID	Agreement on the transport of dangerous goods by rail
UN	Four-figure identification number of the substance or article taken from the UN Model Regulations
UVCB	Substances of unknown or variable composition, complex reaction products or biological materials
VOC	Volatile organic compounds
vPvB	Very Persistent and very Bioaccumulative
Acute Tox.	Acute toxicity
Aerosol	Aerosol
Aquatic Chronic	Hazardous to the aquatic environment (chronic)
Asp. Tox.	Aspiration hazard
Eye Irrit.	Eye irritation
Flam. Gas	Flammable gas
Flam. Liq.	Flammable liquid
Flam. Sol.	Flammable solid
Press. Gas	Gases under pressure
Repr.	Reproductive toxicity
Skin Irrit.	Skin irritation
STOT RE	Specific target organ toxicity - repeated exposure
STOT SE	Specific target organ toxicity - single exposure
Water-react.	Substance or mixture which in contact with water emits flammable gas

Training guidelines

Inform the personnel about the recommended ways of use, mandatory protective equipment, first aid and prohibited ways of handling the product.

Recommended restrictions of use

Uses advised against: Any type of use not listed in this Safety Data Sheet.

Information about data sources used to compile the Safety Data Sheet

REGULATION (EC) No. 1907/2006 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL (REACH) as amended. REGULATION (EC) No. 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL as amended. Data from the manufacturer of the substance / mixture, if available - information from registration dossiers.

The changes (which information has been added, deleted or modified)

Version 1.

More information

Classification procedure - calculation method.

Statement

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The safety data sheet provides information aimed at ensuring safety and health protection at work and environmental protection. The provided information corresponds to the current status of knowledge and experience and complies with valid legal regulations. The information should not be understood as guaranteeing the suitability and usability of the product for a particular application.