

SECTION 1: IDENTIFICATION OF THE MIXTURE AND OF THE COMPANY/UNDERTAKING.

1.1 Product identifier. **SOLVENT CEMENT** (for PVC-U pipe and fittings)

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

Solvent cement developed for the rigid PVC unions.

Uses advised against:

Uses other than those recommended.

1.3 Details of the supplier of the safety data sheet.

Company: **CEPEX S.A.U.**
Address: C/Lluís companys 51-53
City: 08400 Granollers
Province: Barcelona (España)
Telephone: 00 34 93 870 42 08
Fax: 00 34 93 879 57 11
E-mail: cepex@cepex.com
Web: www.cepex.com

1.4 Emergency telephone number: CEPEX ,S.A.U Phone 00 34 938704208 (Only available during office hours)
Toxicological Information Service (National Institute of Toxicology and Forensic Sciences) **Telephone: +34 91 5620420.**
Information in Spanish (24h / 365 days). Only for the purpose of providing sanitary response in case of emergency.

SECTION 2: HAZARDS IDENTIFICATION.

2.1 Classification of the mixture.

In accordance with Regulation (EU) No 1272/2008:

Acute Tox. 4 : Harmful if inhaled.
Eye Irrit. 2 : Causes serious eye irritation.
Flam. Liq. 2 : Highly flammable liquid and vapour.
STOT SE 3 : May cause drowsiness or dizziness.

2.2 Label elements.

Labelling in accordance with Regulation (EU) No 1272/2008:

Pictograms:



Signal Word:

Danger

H statements. Hazard statements:

H225	Highly flammable liquid and vapour.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H336	May cause drowsiness or dizziness

P statements. Precautionary statements:

P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P233	Keep container tightly closed.
P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
P271	Use only outdoors or in a well-ventilated place.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P305+P351+P338	IN CASE OF CONTACT WITH EYES: Rinse with water carefully for several minutes. Remove contact lenses when they are present and can be done easily. Continue with the washing.
P312	Call a POISON CENTRE or doctor if you fell unwell .

P337+P313 If eye irritation persists: Get medical advice/attention.
P370+P378 In case of fire: Use a extinguisher of powder or CO2 for extinction.
P403+P235 Store in a well-ventilated place. Keep cool.
P501 Dispose of contents/container to an approved waste disposal point.

Indications of supplementary danger :
EUH066 Repeated exposure may cause skin drying or cracking .

Contains:
cyclohexanone, butanone

2.3 Other hazards.

The product may have the following additional risks:
May cause drowsiness or dizziness.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS.

3.1 Substances.

Not Applicable.

3.2 Mixtures.

Substances posing a danger to health or the environment in accordance with the Regulation (EC) No. 1272/2008, assigned a Community exposure limit in the workplace, and classified as PBT/vPvB or included in the Candidate List:

Identifiers	Name	Concentrate	(*)Classification - Regulation (EC) No 1272/2008	
			Classification	specific concentration limit
Index No: 606-010-00-7 CAS No: 108-94-1 EC No: 203-631-1 Registration No: 01-2119453616-35-XXXX	[1] cyclohexanone	>= 50% < 75 %	Acute Tox. 4 *, H332 - Flam. Liq. 3, H226	-
Index No: 606-002-00-3 CAS No: 78-93-3 EC No: 201-159-0 Registration No: 01-2119457290-43-XXXX	[1] butanone, ethyl methyl ketone	>=10% < 25%	Eye Irrit. 2, H319 - Flam. Liq. 2, H225 - STOT SE 3, H336 EUH066	-

(*) The complete text of the H phrases is given in section 16 of this Safety Data Sheet.

* See Regulation (EC) No. 1272/2008, Annex VI, section 1.2.

[1] Substance with a Community workplace exposure limit (see section 8.1).

SECTION 4: FIRST AID MEASURES.

4.1 Description of first aid measures.

In case of doubt or when symptoms of feeling unwell persist, get medical attention. Never administer anything orally to persons who are unconscious.

Inhalation.

Take the victim into open air; keep them warm and calm. If breathing is irregular or stops, perform artificial respiration. Do not administer anything orally. If unconscious, place them in a suitable position and seek medical assistance.

Eye contact.

If wearing contact lenses, remove them. Wash eyes with plenty of clean and cool water for at least 10 minutes while pulling eyelids up, and seek medical assistance.

Skin contact.

Remove contaminated clothing. Wash skin vigorously with water and soap or a suitable skin cleaner. **NEVER** use solvents or thinners.

Ingestion.

If accidentally ingested, seek immediate medical attention. Keep calm. **NEVER** induce vomiting.

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

Irritant Product, repeated or prolonged contact with skin or mucous membranes can cause redness, blisters or dermatitis, inhalation of spray mist or particles in suspension may cause irritation of the respiratory tract, some symptoms may not be immediate. Can cause allergic reactions.

Harmful Product, prolonged exposure due to inhalation may cause anaesthetic effects and the need for immediate medical assistance.

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

In case of doubt or when symptoms of feeling unwell persist, get medical attention. Never administer anything orally to persons who are unconscious.

SECTION 5: FIREFIGHTING MEASURES.

The product is Highly inflammable, it can cause or considerably worsen a fire, the necessary prevention measures should be taken and risks avoided. In case of fire, the following measures are recommended:

5.1 Extinguishing media.

Recommended extinguishing methods.

Extinguisher powder or CO₂. In case of more serious fires, also alcohol-resistant foam and water spray. Do not use a direct stream of water to extinguish.

5.2 Special hazards arising from the mixture.

Special risks.

Fire can cause thick, black smoke. As a result of thermal decomposition, dangerous products can form: carbon monoxide, carbon dioxide. Exposure to combustion or decomposition products can be harmful to your health.

5.3 Advice for firefighters.

Use water to cool tanks, cisterns, or containers close to the heat source or fire. Take wind direction into account. Prevent the products used to fight the fire from going into drains, sewers, or waterways.

Fire protection equipment.

According to the size of the fire, it may be necessary to use protective suits against the heat, individual breathing equipment, gloves, protective goggles or facemasks, and gloves.

SECTION 6: ACCIDENTAL RELEASE MEASURES.

6.1 Personal precautions, protective equipment and emergency procedures.

Eliminate possible ignition points and ventilate the area. No smoking. Avoid breathing fumes. For exposure control and individual protection measures, see section 8.

6.2 Environmental precautions.

Prevent the contamination of drains, surface or subterranean waters, and the ground.

6.3 Methods and material for containment and cleaning up.

Pick up the spill with non-combustible absorbent materials (soil, sand, vermiculite, diatomite, etc.). Pour the product and the absorbent in an appropriate container. The contaminated area should be immediately cleaned with an appropriate de-contaminator. Pour the decontaminator on the remains in an opened container and let it act various days until no further reaction is produced.

6.4 Reference to other sections.

For exposure control and individual protection measures, see section 8.

For later elimination of waste, follow the recommendations under section 13.

SECTION 7: HANDLING AND STORAGE.

7.1 Precautions for safe handling.

The fumes are heavier than air and can spread across the ground. They can form explosive mixtures with air. Prevent the creation of flammable or explosive fume concentrations in the air; prevent fume concentrations above work exposure limits. The product must only be used in areas where all unprotected flames and other ignition points have been eliminated. Electrical equipment has to be protected according to applicable standards.

The product can be electrostatically charged: always use earth grounds when transferring the product. Operators must use anti-static footwear and clothing, and floors must be conductors.

Keep the container tightly closed and isolated from heat sources, sparks, and fire. Do not use tools that can cause sparks. For personal protection, see section 8. Never use pressure to empty the containers. They are not pressure-resistant containers.

In the application area, smoking, eating, and drinking must be prohibited.

Follow legislation on occupational health and safety.

Keep the product in containers made of a material identical to the original.

7.2 Conditions for safe storage, including any incompatibilities.

Store according to local legislation. Observe indications on the label. Store the containers between 5 and 35° C, in a dry and well-ventilated place, far from sources of heat and direct solar light. Keep far away from ignition points. Keep away from oxidising agents and from highly acidic or alkaline materials. Do not smoke. Prevent the entry of non-authorised persons. Once the containers are open, they must be carefully closed and placed vertically to prevent spills.

The product is not affected by Directive 2012/18/EU (SEVESO III).

7.3 Specific end use(s).

There are no specific recommendations for use of this product other than those already mentioned.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION.

8.1 Control parameters.

Work exposure limit for:

Name	CAS No.	Country	Limit value	ppm	mg/m ³
cyclohexanone	108-94-1	Deutschland [1]	Eight hours	20	80
			Short term	40	160
		España [2]	Eight hours	10	41
			Short term	20	82
		European Union [3]	Eight hours	10 (skin)	40,8 (skin)
			Short term	20 (skin)	81,6 (skin)
		France [4]	Eight hours	10	40,8
			Short term	20	81,6
		United Kingdom [5]	Eight hours	10	41
			Short term	20	82
		Portugal [6]	Eight hours	20	80,3
			Short term		
butanone, ethyl methyl ketone	78-93-3	Deutschland [1]	Eight hours	200	600
			Short term	800	2400
		España [2]	Eight hours	200	600

			Short term	300	900
		European Union [3]	Eight hours	200	600
			Short term	300	900
		France [4]	Eight hours	200	600
			Short term	300	900
		United Kingdom [5]	Eight hours	200	600
			Short term	300	899
		Portugal [6]	Eight hours	200	590
			Short term	300	885
		Sverige [7]	Eight hours	50	150
			Short term	100	300

Biological exposure limit values for:

Name	CAS No.	Country	Biological indicator	BLV	Sampling time
cyclohexanone	108-94-1	España [2]	1,2-Ciclohexanodiol en orina	80 mg/l	Final de la semana laboral
		España [2]	Ciclohexanol en orina	8 mg/l	Final de la jornada laboral
butanone,ethyl methyl ketone	78-93-3	España [2]	Metiletilcetona en orina	2 mg/l	Final de la jornada laboral

[1] Laut Grenzwerte in der Luft am Arbeitsplatz "Luftgrenzwerte" verabschiedet vom Bundesminister für Arbeit und Sozialordnung im Bundesarbeitsblatt.

[2] Según la lista de Valores Límite Ambientales de Exposición Profesional adoptados por el Instituto Nacional de Seguridad e Higiene en el Trabajo (INSHT) para el año 2016.

[3] According both Binding Occupational Exposure Limits (BOELVs) and Indicative Occupational Exposure Limits (IOELVs) adopted by Scientific Committee for Occupational Exposure Limits to Chemical Agents (SCOEL).

[4] Selon la liste de Valeurs limites d'exposition professionnelle aux agents chimiques en France adoptés par Institut national de la recherche scientifique.

[5] According Limit Value (IOELV) list in 2nd Indicative Occupational Exposure adopted by Health and Safety Executive.

[6] De acordo com Português Padrão 1796 adotou pelo Instituto português de qualidade.

[7] According Occupational Exposure Limit Values and Measures against Air Contaminants adopted by Swedish Work Environment Authority.

Concentration levels DNEL/DMEL:

Name	DNEL/DMEL	Type	Value
cyclohexanone	DNEL (Workers)	Inhalation, Long-term, Local effects	40 (mg/m ³)
CAS No: 108-94-1	DNEL (Workers)	Inhalation, Long-term, Systemic effects	40 (mg/m ³)
EC No: 203-631-1			

butanone,ethyl methyl ketone CAS No: 78-93-3 EC No: 201-159-0	DMEL (Workers)	Dermal, Long-term, Systemic effects	20 (mg/kg/d)
	DMEL (Workers)	Inhalation, Long-term, Systemic effects	20 (mg/m3)
	DNEL (Workers)	Inhalation, Long-term, Systemic effects	600 (mg/m³)
	DNEL (General population)	Inhalation, Long-term, Systemic effects	106 (mg/m³)
	DNEL (Workers)	Dermal, Long-term, Systemic effects	1161 (mg/kg bw/day)
	DNEL (General population)	Dermal, Long-term, Systemic effects	412 (mg/kg bw/day)
	DNEL (General population)	Oral, Long-term, Systemic effects	31 (mg/kg bw/day)
	DMEL (General population)	Inhalation, Long-term, Systemic effects	106 (mg/m³)
	DMEL (General population)	Dermal, Long-term, Systemic effects	412 (mg/m3)

DNEL: Derived No Effect Level, level of exposure to the substance below which adverse effects are not anticipated.

DMEL: Derived Minimal Effect Level, exposure level corresponding to a low risk, that risk should be considered a tolerable minimum.

Concentration levels PNEC:

Name	Details	Value
cyclohexanone CAS No: 108-94-1 EC No: 203-631-1	Fresh water	0,0329 (mg/l)
	Marine water	0,0329 (mg/l)
	Sediment-fresh water	0,0951 (mg/l)
	soil	0,0143 (mg/kg)
butanone,ethyl methyl ketone CAS No: 78-93-3 EC No: 201-159-0	aqua (freshwater)	55,8 (mg/L)
	aqua (marine water)	55,8 (mg/L)
	Soil	22,5 (mg/kg soil dw)
	aqua (intermittent releases)	55,8 (mg/L)
	PNEC STP	709 (mg/L)
	sediment (freshwater)	284,74 (mg/kg sediment dw)
	sediment (marine water)	284,7 (mg/kg sediment dw)
	oral (Hazard for predators)	1000 (mg/kg food)

PNEC: Predicted No Effect Concentration, concentration of the substance below which adverse effects are not expected in the environmental compartment.

8.2 Exposure controls.

Measures of a technical nature:

Provide adequate ventilation, which can be achieved by using good local exhaust-ventilation and a good general exhaust system.

Concentration:	100 %		
Uses:	Solvent cement PVC.THF High pressure		
Breathing protection:			
PPE:	Filter mask for protection against gases and particles.		
Characteristics:	«CE» marking, category III. The mask must have a wide field of vision and an anatomically designed form in order to be sealed and watertight.		
CEN standards:	EN 136, EN 140, EN 405		
Maintenance:	Should not be stored in places exposed to high temperatures and damp environments before use. Special attention should be paid to the state of the inhalation and exhalation valves in the face adaptor.		
Observations:	Read carefully the manufacturer's instructions regarding the equipment's use and maintenance. Attach the necessary filters to the equipment according to the specific nature of the risk (Particles and aerosols: P1-P2-P3, Gases and vapours: A-B-E-K-AX), changing them as advised by the manufacturer.		
Filter Type needed:	A2		
Hand protection:			
PPE:	Protective gloves against chemicals.		
Characteristics:	«CE» marking, category III.		
CEN standards:	EN 374-1, En 374-2, EN 374-3, EN 420		
Maintenance:	Keep in a dry place, away from any sources of heat, and avoid exposure to sunlight as much as possible. Do not make any changes to the gloves that may alter their resistance, or apply paints, solvents or adhesives.		
Observations:	Gloves should be of the appropriate size and fit the user's hand well, not being too loose or too tight. Always use with clean, dry hands.		
Material:	PVC (polyvinyl chloride)	Breakthrough time (min.):	> 480
		Material thickness (mm):	0,35
Eye protection:			
PPE:	Protective goggles with built-in frame.		
Characteristics:	«CE» marking, category II. Eye protector with built-in frame for protection against splashing liquid, dust, smoke, fog and vapour.		
CEN standards:	EN 165, EN 166, EN 167, EN 168		
Maintenance:	Visibility through lenses should be ideal. Therefore, these parts should be cleaned daily. Protectors should be disinfected periodically following the manufacturer's instructions.		
Observations:	Some signs of wear and tear include: yellow colouring of the lenses, superficial scratching of the lenses, scraping etc.		
Skin protection:			
PPE:	Anti-static protective clothing.		
Characteristics:	«CE» marking, category II. Protective clothing should not be too tight or loose in order not to obstruct the user's movements.		
CEN standards:	EN 340, EN 1149-1, EN 1149-2, EN 1149-3, EN 1149-5		

Maintenance:	In order to guarantee uniform protection, follow the washing and maintenance instructions provided by the manufacturer.
Observations:	The protective clothing should offer a level of comfort in line with the level of protection provided in terms of the hazard against which it protects, bearing in mind environmental conditions, the user's level of activity and the expected time of use.
PPE:	Anti-static safety footwear.
Characteristics:	«CE» marking, category II.
CEN standards:	EN ISO 13287, EN ISO 20344, EN ISO 20346
Maintenance:	The footwear should be checked regularly
Observations:	The level of comfort during use and acceptability are factors that are assessed very differently depending on the user. Therefore, it is advisable to try on different footwear models and, if possible, different widths.



SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES.

9.1 Information on basic physical and chemical properties.

Appearance: N.A./N.A.
 Colour: colorless
 Odour: Characteristic
 Odour threshold: N.A./N.A.
 pH: N.A./N.A.
 Melting point: N.A./N.A.
 Boiling Point: 115 °C
 Flash point: <5 °C
 Evaporation rate: N.A./N.A.
 Inflammability (solid, gas): N.A./N.A.
 Lower Explosive Limit: N.A./N.A.
 Upper Explosive Limit: N.A./N.A.
 Vapour pressure: 12,522
 Vapour density: N.A./N.A.
 Relative density: 1 g/cm³
 Solubility: water insoluble
 Liposolubility: N.A./N.A.
 Hydrosolubility: N.A./N.A.
 Partition coefficient (n-octanol/water): N.A./N.A.
 Auto-ignition temperature: N.A./N.A.
 Decomposition temperature: N.A./N.A.
 Viscosity: N.A./N.A.
 Explosive properties: N.A./N.A.
 Oxidizing properties: N.A./N.A.
 N.A./N.A.= Not Available/Not Applicable due to the nature of the product

9.2 Other information.

Pour point: N.A./N.A.
 Blink: N.A./N.A.
 Kinematic viscosity: 26000 cPs
 N.A./N.A.= Not Available/Not Applicable due to the nature of the product

SECTION 10: STABILITY AND REACTIVITY.

10.1 Reactivity.

The product does not present hazards by their reactivity.

10.2 Chemical stability.

Unstable in contact with:

- Acids.
- Bases.
- Oxidizing agents.

10.3 Possibility of hazardous reactions.

In certain conditions this may cause a polymerization reaction.

10.4 Conditions to avoid.

Avoid the following conditions:

- Heating.
- High temperature.
- Contact with incompatible materials.

10.5 Incompatible materials.

Avoid the following materials:

- Acids.
- Bases.
- Oxidizing agents.

10.6 Hazardous decomposition products.

Depending on conditions of use, can be generated the following products:

- COx (carbon oxides).
- Organic compounds.

SECTION 11: TOXICOLOGICAL INFORMATION.

IRRITANT PREPARATION. Splatters in the eyes can cause irritation.

11.1 Information on toxicological effects.

Repeated or prolonged contact with the product can cause the elimination of oil from the skin, giving rise to non-allergic contact dermatitis and absorption of the product through the skin.

Splatters in the eyes can cause irritation and reversible damage.

Toxicological information about the substances present in the composition.

Name	Acute toxicity			
	Type	Test	Kind	Value
cyclohexanone CAS No: 108-94-1 EC No: 203-631-1	Oral	LD50	Rat	1530 mg/kg bw [1]
		[1] American Industrial Hygiene Association Journal. Vol. 30, Pg. 470, 1969		
	Dermal	LD50	Rabbit	947 mg/kg bw [1]
		[1] American Industrial Hygiene Association Journal. Vol. 30, Pg. 470, 1969		
	Inhalation	LC50	Rat	32,1 mg/l/4 h [1]
		[1] Raw Material Data Handbook, Vol.1: Organic Solvents, 1974. Vol. 1, Pg. 18, 1974		
butanone,ethyl methyl ketone	Oral	LD50	Rat	2740 mg/kg bw [1]
		LD50	Rat	4.29 mL/kg bw [2]
		LD50	Rat (male)	2054 mg/kg [3]
		LD50	Rat (female)	2328 mg/kg [4]

CAS No: 78-93-3 EC No: 201-159-0		<p>[1] Toxicology and Applied Pharmacology. Vol. 19, Pg. 699, 1971</p> <p>[2] OECD Guideline 423 (Acute Oral toxicity - Acute Toxic Class Method)</p> <p>[3] OECD Guideline 423 (Acute Oral toxicity - Acute Toxic Class Method) -reliability scoring was based on 2001 guideline.</p> <p>[4] OECD Guideline 423 (Acute Oral toxicity - Acute Toxic Class Method) -reliability scoring was based on 2001 guideline.</p>
	Dermal	<p>LD50 Rabbit 6480 mg/kg bw [1]</p> <p>LD50 Rabbit >10 mL/kg bw [2]</p> <p>[1] Shell Chemical Company. Vol. MSDS-5390-4</p> <p>[2] OECD Guideline 402 (Acute Dermal Toxicity), Range-Finding Toxicity Data: List VI, Smyth H, Carpenter C, Weil C, Pozzani U, & Striegel J, 1962.</p>
	Inhalation	

a) acute toxicity;
Product classified:
Acute toxicity (Inhalation), Category 4: Harmful if inhaled.

Acute Toxicity Estimate (ATE):
Mixtures:
ATE (Inhalation) = 17 mg/l/4 h (Fumes)

b) skin corrosion/irritation;
Not conclusive data for classification.

c) serious eye damage/irritation;
Product classified:
Eye irritation, Category 2: Causes serious eye irritation.

d) respiratory or skin sensitisation;
Not conclusive data for classification.

e) germ cell mutagenicity;
Not conclusive data for classification.

f) carcinogenicity;
Not conclusive data for classification.

g) reproductive toxicity;
Not conclusive data for classification.

h) STOT-single exposure;
Based on available data, the classification criteria are not met.

i) STOT-repeated exposure;
Not conclusive data for classification.

j) aspiration hazard;
Not conclusive data for classification.

SECTION 12: ECOLOGICAL INFORMATION.

12.1 Toxicity.

Name	Ecotoxicity			
	Type	Test	Kind	Value
cyclohexanone CAS No: 108-94-1 EC No: 203-631-1	Fish	LC50	Fish	630 mg/l (96 h) [1]
		[1] Veith, G.D., D.J. Call, and L.T. Brooke 1983. Estimating the Acute Toxicity of Narcotic Industrial Chemicals to Fathead Minnows. In: W.E.Bishop, R.D.Cardwell, and B.B.Heidolph (Eds.), Aquatic Toxicology and Hazard Assessment, 6th Symp., ASTM STP 802, Philadelphia, PA :90-97 (Most LC50 Data Publ As 12448, 12447, 12858, 12859, 3217)		
	Aquatic invertebrates			
	Aquatic plants			
butanone,ethyl methyl ketone	Fish		Fish	
		LC50	Pimephales promelas	3220 mg/l (96 h) [1]
		LC50	Pimephales promelas	2993 mg/l (96 h) [2]
		EC0	Pimephales promelas	1848 mg/l (96 h) [3]
		LC50	Pimephales promelas	1816 mg/l (24 h) [4]
		LC50	Pimephales promelas	1656 mg/l (72 h) [5]
	Aquatic invertebrates	EC50	Crustacean	5090 mg/l (48 h) [1]
		EC50	Daphnia magna	308 mg/l (48 h) [2]
		EC0	Daphnia magna	136 mg/l (48 h) [3]
		LC50	Daphnia magna	8890 mg/l (24 h) [4]
		LC100	Daphnia magna	>10000 mg/l (24 h) [5]

		<p>[1] Randall, T.L., and P.V. Knopp 1980. Detoxification of Specific Organic Substances by Wet Oxidation. J.Water Pollut.Control Fed. 52(8):2117-2130</p> <p>[2] OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test) reliability scoring based on 2002 guideline.</p> <p>[3] OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test) reliability scoring based on 2002 guideline.</p> <p>[4] Experimental result, 1977.</p> <p>[5] Experimental result, 1977.</p>														
	Aquatic plants	<table><tr><td>CE50</td><td>Desmodesmus subspicatus</td><td></td></tr><tr><td>EC50</td><td>Pseudokirchnerella subcapitata</td><td>>100 mg/L (7 dias)</td></tr><tr><td>EC50</td><td>Pseudokirchnerella subcapitata</td><td>2029 mg/l (96 h) [1]</td></tr><tr><td>TT (toxicity threshold concentration)</td><td>Pseudokirchnerella subcapitata</td><td>1888 mg/l (48 h) [2]</td></tr><tr><td></td><td>Scenedesmus quadricauda</td><td>4300 mg/l (8 d) [3]</td></tr></table> <p>[1] OECD Guideline 201 (Alga, Growth Inhibition Test) reliability based in 2006 guideline.</p> <p>[2] OECD Guideline 201 (Alga, Growth Inhibition Test) reliability based in 2006 guideline.</p> <p>[3] Experimental result, 1976.</p>	CE50	Desmodesmus subspicatus		EC50	Pseudokirchnerella subcapitata	>100 mg/L (7 dias)	EC50	Pseudokirchnerella subcapitata	2029 mg/l (96 h) [1]	TT (toxicity threshold concentration)	Pseudokirchnerella subcapitata	1888 mg/l (48 h) [2]		Scenedesmus quadricauda
CE50	Desmodesmus subspicatus															
EC50	Pseudokirchnerella subcapitata	>100 mg/L (7 dias)														
EC50	Pseudokirchnerella subcapitata	2029 mg/l (96 h) [1]														
TT (toxicity threshold concentration)	Pseudokirchnerella subcapitata	1888 mg/l (48 h) [2]														
	Scenedesmus quadricauda	4300 mg/l (8 d) [3]														

CAS No: 78-93-3

EC No: 201-159-0

12.2 Persistence and degradability.

No information is available about persistence and degradability of the product.

12.3 Bioaccumulative potencial.

Information about the bioaccumulation of the substances present.

Name	Bioaccumulation			
	Log Pow	BCF	NOECs	Level
cyclohexanone N. CAS: 108-94-1 EC No: 203-631-1	0,81	-	-	Very low
butanone,ethyl methyl ketone N. CAS: 78-93-3 EC No: 201-159-0	0,29	3,2	-	Very low

12.4 Mobility in soil.

No information is available about the mobility in soil.

The product must not be allowed to go into sewers or waterways.

Prevent penetration into the ground.

12.5 Results of PBT and vPvB assessment.

No information is available about the results of PBT and vPvB assessment of the product.

12.6 Other adverse effects.

No information is available about other adverse effects for the environment.

SECTION 13 DISPOSAL CONSIDERATIONS.

13.1 Waste treatment methods.

Do not dump into sewers or waterways. Waste and empty containers must be handled and eliminated according to current, local/national legislation.

Follow the provisions of Directive 2008/98/EC regarding waste management.

Waste classification according to the European Waste Catalogue:

08 WASTES FROM THE MANUFACTURE, FORMULATION, SUPPLY AND USE (MFSU) OF COATINGS (PAINTS, VARNISHES AND VITREOUS ENAMELS), ADHESIVES, SEALANTS AND PRINTING INKS

08 04 wastes from MFSU of adhesives and sealants (including waterproofing products)

08 04 09 waste adhesives and sealants containing organic solvents or other hazardous substances

Waste classified as hazardous.

SECTION 14: TRANSPORT INFORMATION.

Transport following ADR rules for road transport, RID rules for railway, ADN for inner waterways, IMDG for sea, and ICAO/IATA for air transport.

Land: Transport by road: ADR, Transport by rail: RID.

Transport documentation: Consignment note and written instructions

Sea: Transport by ship: IMDG.

Transport documentation: Bill of lading

Air: Transport by plane: ICAO/IATA.

Transport document: Airway bill.

14.1 UN number.

UN No: UN1133

14.2 UN proper shipping name.

Description:

ADR: UN 1133, ADHESIVES, 3, PG II, (D/E)

IMDG: UN 1133, ADHESIVES, 3, PG II (5°C)

ICAO: UN 1133, ADHESIVES, 3, PG II

14.3 Transport hazard class(es).

Class(es): 3

14.4 Packing group.

Packing group: II

14.5 Environmental hazards.

Marine pollutant: No

14.6 Special precautions for user.

Labels: 3



Hazard number: 33

ADR LQ: 5 L

IMDG LQ: 5 L

ICAO LQ: 1 L

Provisions concerning carriage in bulk ADR: Not authorized carriage in bulk in accordance with ADR.
Transport by ship, FEm – Emergency sheets (F – Fire, S - Spills): F-E,S-D
Proceed in accordance with point 6.

14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code.
The product is not transported in bulk.

SECTION 15: REGULATORY INFORMATION.

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

The product is not affected by the Regulation (EC) No 1005/2009 of the European Parliament and of the Council of 16 September 2009 on substances that deplete the ozone layer.

Volatile organic compound (VOC)

VOC content (p/p): 47,87 %

VOC content: 478,7 g/l

The product is not affected by Directive 2012/18/EU (SEVESO III).

The product is not affected by Regulation (EU) No 528/2012 concerning the making available on the market and use of biocidal products.

The product is not affected by the procedure established Regulation (EU) No 649/2012, concerning the export and import of dangerous chemicals.

Kind of pollutant for the water (Germany): WGK 1: Slightly hazardous for the water. (Autoclassified according to the AwSV Regulations)

15.2 Chemical safety assessment.

No Chemical Safety Assessment has been carried out for this substance/mixture by the supplier.

SECTION 16: OTHER INFORMATION.

Complete text of the H phrases that appear in section 3:

H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H336	May cause drowsiness or dizziness.

Classification codes:

Acute Tox. 4 [Inhalation] : Acute toxicity (Inhalation), Category 4

Eye Irrit. 2 : Eye irritation, Category 2

Flam. Liq. 2 : Flammable liquid, Category 2

Flam. Liq. 3 : Flammable liquid, Category 3

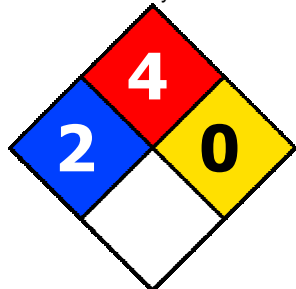
STOT SE 3 : Specific target organ toxicity following a single exposure, Category 3

Changes compared to the previous version: sections 2, 3 and 16.

It is advisable to carry out basic training with regard to health and safety at work in order to handle this product correctly.
Information on the TSCA Inventory (Toxic Substances Control Act) USA:

CAS No	Name	State
108-94-1	cyclohexanone	Registered
78-93-3	butanone,ethyl methyl ketone	Registered

Risk classification system NFPA 704:



Health hazard: 2 (Hazardous)

Flammability: 4 (Below 73°F)

Reactivity: 0 (Stable)

Abbreviations and acronyms used:

ADR:	European Agreement concerning the International Carriage of Dangerous Goods by Road.
AwSV:	Facility Regulations for handling substances that are hazardous for the water.
BCF:	Bioconcentration factor.
CEN:	European Committee for Standardization.
DMEL:	Derived Minimal Effect Level, exposure level corresponding to a low risk, that risk should be considered a tolerable minimum.
DNEL:	Derived No Effect Level, level of exposure to the substance below which adverse effects are not anticipated.
EC50:	Half maximal effective concentration.
PPE:	Personal protection equipment.
IATA:	International Air Transport Association.
ICAO:	International Civil Aviation Organization.
IMDG:	International Maritime Code for Dangerous Goods.
LC50:	Lethal concentration, 50%.
LD50:	Lethal dose, 50%.
Log Pow:	Logarithm of the partition octanol-water.
NOEC:	No observed effect concentration.
PNEC:	Predicted No Effect Concentration, concentration of the substance below which adverse effects are not expected in the environmental compartment.
RID:	Regulations Concerning the International Transport of Dangerous Goods by Rail.
WGK:	Water hazard classes.

Key literature references and sources for data:

<http://eur-lex.europa.eu/homepage.html>

<http://echa.europa.eu/>

Regulation (EU) 2015/830.

Regulation (EC) No 1907/2006.

Regulation (EU) No 1272/2008.

The information given in this Safety Data Sheet has been drafted in accordance with COMMISSION REGULATION (EU) 2015/830 of 28 May 2015 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a 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.

The information in this Safety Data Sheet on the Preparation is based on current knowledge and on current EC and national laws, as far as the working conditions of the users is beyond our knowledge and control. The product must not be used for purposes other than those that are specified without first having written instructions on how to handle. It is always the responsibility of the user to take the appropriate measures in order to comply with the requirements established by current legislation. The information contained in this Safety Sheet only states a description of the safety requirements for the preparation, and it must not be considered as a guarantee of its properties.