(in accordance with Regulation (EU) 2015/830)

PANDSER® PRIMER EPDM

BERDAL

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

1.1 Product identifier.

Product Name:

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

INDUSTRIAL AND PROFESSIONAL ADHESIVE

Uses advised against:

Uses other than those recommended.

1.3 Details of the supplier of the safety data sheet.

Company: BERDAL Rubber & Plastics B.V.

Address:	Bedrijvenpark Twente 193, 7602 KG			
City:	Almelo			
Telephone:	+31 546 572 672			
Fax:	+31 546 575 635			
E-mail:	sales@berdal.com			
Web:	www.berdal.com			

1.4 Emergency telephone number: +44 111

UFI CODE: T39S-2DE4-SF09-XC3R

SECTION 2: HAZARDS IDENTIFICATION.

2.1 Classification of the substance or mixture.

In accordance with Regulation (EU) No 1272/2008: Aquatic Chronic 2 : Toxic to aquatic life with long lasting effects. Eye Irrit. 2 : Causes serious eye irritation. Flam. Liq. 2 : Highly flammable liquid and vapour. Repr. 2 : Suspected of damaging fertility or the unborn child. STOT RE 2 : May cause damage to organs through prolonged or repeated exposure. STOT SE 3 : May cause drowsiness or dizziness. Skin Irrit. 2 : Causes skin irritation.

2.2 Label elements.

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



H statements:

H225	Highly	flammable	liquid	and	vapour

- H315 Causes skin irritation.
- H319 Causes serious eye 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.
- H411 Toxic to aquatic life with long lasting effects.

P statements:

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P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P233	Keep container tightly closed.
P260	Do not breathe dust/fume/gas/mist/vapours/spray.
P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing/eye protection/face protection/hearing protection/
P370+P378	In case of fire: Use CO2, chemical foam or dusty. Never use water.

Contains:

toluene propan-2-ol, isopropyl alcohol, isopropanol acetone, propan-2-one, propanone Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics

2.3 Other hazards.

In normal use conditions and in its original form, the product itself does not involve any other risk for health and the environment.

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:

			(*)Classification - Regulation (EC) No 1272/2008	
Identifiers	Name	Concentrate	Classification	specific concentration limit
Index No: 601-021- 00-3 CAS No: 108-88-3 EC No: 203-625-9 Registration No: 01- 2119471310-51-XXXX	[1] toluene	20 - 50 %	Asp. Tox. 1, H304 - Flam. Liq. 2, H225 - Repr. 2, H361d *** - STOT RE 2 *, H373 ** - STOT SE 3, H336 - Skin Irrit. 2, H315	-
CAS No: 64742-49-0 Registration No: 01- 2119475515-33-XXXX	Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics	25 - 50 %	Aquatic Chronic 2, H411 - Asp. Tox. 1, H304 - Flam. Liq. 2, H225 - STOT SE 3, H336 - Skin Irrit. 2, H315	-
Index No: 606-001- 00-8 CAS No: 67-64-1 EC No: 200-662-2 Registration No: 01- 2119471330-49-XXXX	[1] acetone, propan-2-one, propanone	10 - 20 %	Eye Irrit. 2, H319 - Flam. Liq. 2, H225 - STOT SE 3, H336	-
Index No: 603-117- 00-0 CAS No: 67-63-0 EC No: 200-661-7 Registration No: 2119457558-XXXX	[1] propan-2-ol, isopropyl alcohol, isopropanol	1 - 10 %	Eye Irrit. 2, H319 - Flam. Liq. 2, H225 - STOT SE 3, H336	-

(*) 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).

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SECTION 4: FIRST AID MEASURES.

IRRITANT MIXTURE. Its repeated or prolonged contact with the skin or mucous membranes can cause irritant symptoms such as reddening of the skin, blisters, or dermatitis. Some of the symptoms may not be immediate. They can cause allergic reactions on the skin.

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.

Remove contact lenses, if present and if it is easy to do. Wash eyes with plenty of clean and cool water for at least 10 minutes while pulling eyelids up, and seek medical assistance. Dont let the person to rub the affected eye.

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. Long-term chronic exposure may result in injury to certain organs or tissues.

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. Keep the person comfortable. Turn him/her over to the left side and stay there while waiting for medical care.

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.

Suitable extinguishing media:

Extinguisher powder or CO2. In case of more serious fires, also alcohol-resistant foam and water spray.

Unsuitable extinguishing media:

Do not use a direct stream of water to extinguish. In the presence of electrical voltage, you cannot use water or foam as extinguishing media.

5.2 Special hazards arising from the substance or 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.

During a fire and depending on its magnitude the following may occur: - Flammable vapors or gases.

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. Product residues and extinguishing media may contaminate the aquatic environment. Follow the instructions given in the emergency or fire evacuation plan or plans if available.

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 boots. During extinction and depending on the magnitude and proximity to the fire, additional protective equipment such as chemical protection gloves, heat-reflecting suits or gas-tight suits may be required.



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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.

Product dangerous for the environment, in case of large spills or if the product contaminates lakes, rivers, or sewers, inform the responsible authorities according to local legislation. Prevent the contamination of drains, surface or subterranean waters, and the ground.

6.3 Methods and material for containment and cleaning up.

Contain and collect spillage with inert absorbent material (earth, sand, vermiculite, Kieselguhr...) and clean the area immediately with a suitable decontaminant.

Deposit waste in closed and suitable containers for disposal, in compliance with local and national regulations

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 antistatic 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.

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

Follow legislation on occupational health and safety.

Never use pressure to empty the containers. They are not pressure-resistant containers. 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 25° C, in a dry and wellventilated 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).

Not available.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION.

8.1 Control parameters.

Work exposure limit for:

Name	CAS No.	Country	Limit value	ppm	mg/m ³
toluene		European	Eight hours	50 (skin)	192 (skin)
	108-88-3	Union [1]	Short term	100 (skin)	384 (skin)
		United	Eight hours	50	191
		Kingdom [2]	Short term	100	384
		Éire [3]	Eight hours	50	192

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		1		100	204
		Linited Chat	Short term	100 10	384
		United States [4] (Cal/OSHA)	Eight hours Short term		
				150 (Ceiling) 500	
		United States	Eight hours	100	
		[5] (NIOSH)	Short term	150	
			Eight hours	200	
		United States [6] (OSHA)	Short term	300 Acceptable maximum peak above the acceptable ceiling concentration for an 8-hr shift:	
				500 [10 min]	
		European	Eight hours	500	1210
		Union [1]	Short term		
		United	Eight hours	500	1210
		Kingdom [2]	Short term	1500	3620
		Éire [3]	Eight hours	500	1210
			Short term		
acetone, propan-2-one, propanone	67-64-1	United States	Eight hours	500	
		[4] (Cal/OSHA)	Short term	750 (Ceiling) 3000	
		United States	Eight hours	250	
		[5] (NIOSH)	Short term		
		United States	Eight hours	1000	2400
		[6] (OSHA)	Short term		
		United	Eight hours	400	999
		Kingdom [2]	Short term	500	1250
		É	Eight hours	200	
		Éire [3]	Short term	400	
propan-2-ol, isopropyl alcohol,	(7 (2 0	United States	Eight hours	400	
isopropanol	67-63-0	[4] (Cal/OSHA)	Short term	500	
		United States	Eight hours	400	
		[5] (NIOSH)	Short term	500	
		United States	Eight hours	400	980
		[6] (OSHA)	Short term		

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

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

[3] According Code of Practice for the Safety, Health and Welfare at Work (Chemicals Agents) Regulations adopted by Health and Safety Authority (HSA).

[4] California Division of Occupational Safety and Health (Cal/OSHA) Permissible Exposure Limits (PELs).

[5] National Institute for Occupational Safety and Health. NIOSH Recommendations for occupational safety and health,

Compendium of Policy Documents and Statements, January, 1992, DHHS (NIOSH) Publication No. 92-100.

[6] Occupational Safety and Health Administration, United States Department of Labor. Permissible Exposure limits (PELs), California Division of Occupational Safety and Health (Cal/OSHA) Permissible Exposure Limits (PELs).

The product does NOT contain substances with Biological Limit Values.

Concentration levels DNEL/DMEL:

Name	DNEL/DMEL	Туре	Value
	DNEL	Inhalation, Long-term, Local effects	192
	(Workers)		(mg/m ³)
	DNEL (General	Inhalation, Long-term, Local effects	56,5
	population)		(mg/m ³)
taluana	DNEL	Inhalation, Long-term, Systemic effects	192
toluene CAS No: 108-88-3	(Workers)		(mg/m ³)
EC No: 203-625-9	DNEL (General	Inhalation, Long-term, Systemic effects	56,5
LC NO. 205-025-9	population)		(mg/m ³)
	DNEL	Inhalation, Acute, Systemic effects	384
	(Workers)		(mg/m ³)
	DNEL (General	Inhalation, Acute, Systemic effects	226
	population)		(mg/m ³)

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	DNEL	Inhalation, Acute, Local effects	384
	(Workers)	Initialation, Acute, Local effects	(mg/m ³)
	DNEL (General	Inhalation, Acute, Local effects	226
	population)	Initiation, Acute, Eocal chects	(mg/m ³)
	DNEL	Dermal, Long-term, Systemic effects	384
	(Workers)		(mg/kg
	(bw/day)
	DNEL (General	Dermal, Long-term, Systemic effects	226
	population)		(mg/kg
			bw/day)
	DNEL (General	Oral, Long-term, Systemic effects	8,13
	population)		(mg/kg
			bw/day)
	DNEL	Inhalation, Long-term, Systemic effects	1210
	(Workers)		(mg/m ³)
	DNEL (General	Inhalation, Long-term, Systemic effects	200
	population)		(mg/m ³)
	DNEL	Inhalation, Acute, Local effects	2420
acetone, propan-2-one, propanone CAS No: 67-64-1	(Workers) DNEL	Dermal Long torm Cratemic effects	(mg/m ³) 186
EC No: 200-662-2	(Workers)	Dermal, Long-term, Systemic effects	(mg/kg
LC NO. 200-002-2	(WOIKEIS)		bw/day)
	DNEL (General	Dermal, Long-term, Systemic effects	62 (mg/kg
	population)	Dermal, Long term, Systemic effects	bw/day)
	DNEL (General	Oral, Long-term, Systemic effects	62 (mg/kg
	population)	oral, zong term, bysterme enects	bw/day)
	DNEL	Inhalation, Long-term, Systemic effects	500
	(Workers)	, 3 , ,	(mg/m ³)
	DNEL (General	Inhalation, Long-term, Systemic effects	89
	population)		(mg/m ³)
propan-2-ol, isopropyl alcohol, isopropanol	DNEL	Dermal, Long-term, Systemic effects	888
CAS No: 67-63-0	(Workers)		(mg/kg
EC No: 200-661-7			bw/day)
	DNEL (General	Dermal, Long-term, Systemic effects	319
	population)		(mg/kg
			bw/day)
	DNEL (General	Oral, Long-term, Systemic effects	26 (mg/kg
	population)		bw/day)

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
	aqua (freshwater)	0,68 (mg/L)
	aqua (marine water)	0,68 (mg/L)
toluene	aqua (intermittent releases)	0,68 (mg/L)
CAS No: 108-88-3	STP	13,61 (mg/L)
EC No: 203-625-9	sediment (freshwater)	16,39 (mg/kg
		sediment dw)
	sediment (marine water)	16,39 (mg/kg
		sediment dw)
	aqua (freshwater)	10,6 (mg/L)
	aqua (marine water)	1,06 (mg/L)
	aqua (intermittent releases)	21 (mg/L)
acetone, propan-2-one, propanone	STP	100 (mg/L)
CAS No: 67-64-1	sediment (freshwater)	30,04 (mg/kg
EC No: 200-662-2		sediment dw)
	sediment (marine water)	3,04 (mg/kg
		sediment dw)
	soil	29,5 (mg/kg
		soil dw)
propan-2-ol, isopropyl alcohol, isopropanol	aqua (freshwater)	140,9 (mg/L)
CAS No: 67-63-0	aqua (marine water)	140,9 (mg/L)
EC No: 200-661-7	aqua (intermittent releases)	140,9 (mg/L)

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sediment (freshwater)	552 (mg/kg
	sediment dw)
sediment (marine water)	552 (mg/kg
	sediment dw)
Soil	28 (mg/kg
	soil dw)
STP	2251 (mg/L)
oral (Hazard for predators)	160 (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:	INDUSTRIAL AND PROFESSIONAL ADHESIVE
Breathing protect	
If the recommende	d technical measures are observed, no individual protection equipment is necessary.
Hand protection:	
PPE: Characteristics:	Protective gloves against chemicals. «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.):> 480Material 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 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: Characteristics:	Anti-static safety footwear. «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.

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SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES.

9.1 Information on basic physical and chemical properties.

Appearance: Liquid with characteristic odour and colour Colour: Ambar Odour: ORGANIC SOLVENT Odour threshold:N.A./N.A. pH:N.A./N.A. Melting point:N.A./N.A. Boiling Point: 72 °C Flash point: -2 °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: 89 Vapour density:N.A./N.A. Relative density: 0.80 ± 0.02 Solubility:N.A./N.A. 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.

Dropping point: N.A./N.A. Blink: N.A./N.A. Kinematic viscosity: N.A./N.A. 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.

Stable under the recommended handling and storage conditions (see section 7).

10.3 Possibility of hazardous reactions.

At high temperatures can occur pyrolysis and dehydrogenation.

10.4 Conditions to avoid.

Avoid the following conditions:

- Heating.
- High temperature.

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.
- Aromatics compounds.

In case of fire, dangerous decomposition products can be generated, such as carbon monoxide and dioxide and nitrogen fumes and oxides.

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SECTION 11: TOXICOLOGICAL INFORMATION.

IRRITANT MIXTURE. Splashes in the eyes can cause irritation.

IRRITANT MIXTURE. The inhalation of spray mist or suspended particulates can irritate the respiratory tract. It can also cause serious respiratory difficulties, central nervous system disorders, and in extreme cases, unconsciousness.

IRRITANT MIXTURE. Its repeated or prolonged contact with the skin or mucous membranes can cause irritant symptoms such as reddening of the skin, blisters, or dermatitis. Some of the symptoms may not be immediate. They can cause allergic reactions on the skin.

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.

Toxicological information about the substances present in the composition.

Name	Acute toxicity			
Name	Туре	Test	Kind	Value
	Oral			
		LD50	Rabbit	12200 mg/kg bw [1]
toluene	Dermal	[1] American Industrial Hygiene Association Journal. Vol. 30, Pg. 470, 1969		
		LC50	Rat	49 mg/l/4 h [1]
CAS No: 108-88-3 EC No: 203-625-9	Inhalation			sional'nye Zabolevaniya. Labor Diseases. Vol. 32(10), Pg. 23,
		LD50	Rat	5800 mg/kg bw [1]
acetone, propan-2-one, propanone	Oral	[1] Journal Pg. 609, 19		and Environmental Health. Vol. 15,
	Dermal			
CAS No: 67-64-1 EC No: 200-662-2	Inhalation			

a) acute toxicity;

Not conclusive data for classification.

b) skin corrosion/irritation; Product classified: Skin irritant, Category 2: Causes skin irritation.

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; Product classified: Reproductive toxicant, Category 2: Suspected of damaging fertility or the unborn child.

h) STOT-single exposure; Product classified: Specific target organ toxicity following a single exposure, Category 3: May cause drowsiness or dizziness.

i) STOT-repeated exposure;

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Product classified:

Specific target organ toxicity following a repeated exposure, Category 2: May cause damage to organs through prolonged or repeated exposure.

j) aspiration hazard;

Based on available data, the classification criteria are not met.

SECTION 12: ECOLOGICAL INFORMATION.

12.1 Toxicity.

N	Ecotoxicity				
Name	Туре	Test	Kind	Value	
	Fish	LC50 Fish 31,7 mg/l (96 h) [1] [1] Geiger, D.L., L.T. Brooke, and D.J. Call 1990. Acute Toxicities of Organic Chemicals to Fathead Minnows (Pimephales promelas), Volume 5. Ctr.for Lake Superior Environ.Stud., Univ.of Wisconsin-Superior, Superior, WI :332 p			
toluene	Aquatic invertebrates	LC50 Crustacean 92 mg/l (48 h) [1] [1] MacLean, M.M., and K.G. Doe 1989. The Comparative Toxicity of Crude and Refined Oils to Daphnia magna and Artemia. Environment Canada, EE-111, Dartmouth, Nova Scotia :64 p			
CAS No: 108-88-3 EC No: 203-625-9	Aquatic plants	M.L.Tosato of Aquatic Ecotoxicol.	1988. Approaches to Organisms to Aroma Environ.Saf. 16(2):1	58-169	
acetone, propan-2-one, propanone	Fish	LC50Fish8300 mg/l (96 h) [1][1] Cairns, J.Jr., and A. Scheier 1968. A Comparison of the Toxicity of Some Common Industrial Waste Components Tested Individually and Combined. Prog.Fish-Cult. 30(1):3-8			
	Aquatic invertebrates	LC50Crustacean8450 mg/l (48 h) [1][1] Cowgill, U.M., and D.P. Milazzo 1991. The Sensitivity of Ceriodaphnia dubia and Daphnia magna to Seven Chemicals Utilizing the Three-Brood Test. Arch.Environ.Contam.Toxicol. 20(2):211-217. Canton, J.H., and D.M.M. Adema 1978. Reproducibility of Short-Term and Reproduction Toxicity Experiments with Daphnia magna and Comparison of the Sensitivity of Daphnia magna with Daphnia pulex and Daphnia cucullata in Short-Term Experiments. Hydrobiologia 59(2):135-140 (Used Reference 2018)			
CAS No: 67-64-1 EC No: 200-662-2	Aquatic plants	Term Effect Different T	ts of 15 Chemicals o	7200 mg/l (96 h) [1] ative Study on the Short- n Fresh Water Organisms of cch.Inf.Serv., Springfield, VA PB83-200386)	

12.2 Persistence and degradability.

No information is available regarding the biodegradability of the substances present.

(in accordance with Regulation (EU) 2015/830)

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

12.3 Bioaccumulative potential.

Information about the bioaccumulation of the substances present.

Name		Bioaccumulation			
		Log Pow	BCF	NOECs	Level
toluene		2 72	-	-	Low
CAS No: 108-88-3	EC No: 203-625-9	2,73			
propan-2-ol, isopropyl alcohol, isopropanol		0.05			Versley
CAS No: 67-63-0	EC No: 200-661-7	0,05	-	-	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.

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 <u>Air</u>: Transport by plane: ICAO/IATA. Transport document: Airway bill.

(in accordance with Regulation (EU) 2015/830)

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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 (HYDROCARBONS, C7, N-ALKANES, ISOALKANES, CYCLICS), 3, PG II (-2°C), MARINE POLLUTANT ICAO/IATA: 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.



Dangerous for the environment

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 substance or 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): 83 % VOC content: 664 g/l

Product classification according to Annex I of Directive 2012/18/EU (SEVESO III): N/A

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.

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Restrictions on the manufacturing, placing on the market and use of certain dangerous substances, mixtures and articles:

Designation of the substance, of the group of substances or of the mixture	Conditions of restriction
48. Toluene CAS No 108-88-3 EC No 203-625-9	Shall not be placed on the market, or used, as a substance or in mixtures in a concentration equal to or greater than 0,1 % by weight where the substance or mixture is used in adhesives or spray paints intended for supply to the general public.

Kind of pollutant to water (Germany): WGK 2: Hazardous to water. (Autoclassified according to the AwSV Regulations) Storage Classe: 3

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.
- H304 May be fatal if swallowed and enters airways.
- H315 Causes skin irritation.
- H319 Causes serious eye 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.
- H411 Toxic to aquatic life with long lasting effects.

Classification codes:

Aquatic Chronic 2 : Chronic effect to the aquatic environment, Category 2 Asp. Tox. 1 : Aspiration toxicity, Category 1 Eye Irrit. 2 : Eye irritation, Category 2 Flam. Liq. 2 : Flammable liquid, Category 2 Repr. 2 : Reproductive toxicant, Category 2 STOT RE 2 : Specific target organ toxicity following a repeated exposure, Category 2 STOT SE 3 : Specific target organ toxicity following a single exposure, Category 3 Skin Irrit. 2 : Skin irritant, Category 2

Changes regarding to the previous version:

- Modification in the values of the physical and chemical properties (SECTION 9).
- Change in the hazard classification (SECTION 11.1).
- National legislative changes (SECTION 15.1).

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:

Physical hazards	On basis of test data
Health hazards	Calculation method
Environmental hazards	Calculation method

It is advisable to carry out basic training with regard to health and safety at work in order to handle this product correctly.

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

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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 (EC) 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.