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

1.1 Product identifier.
Product Name: AQUASHIELD FORTE
UFI: CP50-90V1-300J-GFYU

1.2 Relevant identified uses of the substance or mixture and uses advised against.
Nanoparticle-based reinforced hydrophobic coating for facades. Professional use.

Uses advised against:
Uses other than those recommended.

1.3 Details of the supplier of the safety data sheet.

Company: **Tecnología Navarra de Nanoproductos S.L.**
Address: Área Industrial Perguita, Calle A, nº1
City: 31210 - Los Arcos
Province: Navarra (ESPAÑA)
Telephone: +34 948 64 03 18
Fax: +34 948 64 03 19
E-mail: tecnan@tecnan-nanomat.es
Web: www.tecnan-nanomat.es

1.4 Emergency telephone number: +34 948 64 03 18 (Only available during office hours; Monday-Friday; 08:00-18:00)

SECTION 2: HAZARDS IDENTIFICATION.

2.1 Classification of the substance or mixture.
In accordance with Regulation (EC) No 1272/2008:
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 (EC) No 1272/2008:
Pictograms:



Signal Word:
Danger
Hazard statements:

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

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.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P370+P378	In case of fire: Use ABC powder, CO2 or alcohol resistant foam to extinguish.
P403+P235	Store in a well-ventilated place. Keep cool.

Contains:
propan-2-ol, isopropyl alcohol, isopropanol
n-butyl acetate

-Continued on next page.-

2.3 Other hazards.
The mixture contains PBT substances in a concentration lower than 0.1%
The mixture contains vPvB substances in a concentration lower than 0.1%
The mixture does not contain any endocrine disrupting properties substances.
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:

Identifiers	Name	Concentrate	(*)Classification - Regulation (EC) No 1272/2008	
			Classification	Specifics concentration limits and Acute toxicity estimate
Index No: 603-117-00-0 CAS No: 67-63-0 EC No: 200-661-7 Registration No: 01-2119457558-25-XXXX	[2] propan-2-ol, isopropyl alcohol, isopropanol	75 - 100 %	Eye Irrit. 2, H319 - Flam. Liq. 2, H225 - STOT SE 3, H336	-
Index No: 603-002-00-5 CAS No: 64-17-5 EC No: 200-578-6 Registration No: 01-2119457610-43-XXXX	[2] ethanol, ethyl alcohol	0 - 25 %	Eye Irrit. 2, H319 - Flam. Liq. 2, H225	-
Index No: 607-025-00-1 CAS No: 123-86-4 EC No: 204-658-1 Registration No: 01-2119485493-29-XXXX	[2] n-butyl acetate	1 - 20 %	Flam. Liq. 3, H226 - STOT SE 3, H336, EUH066	-
Index No: 014-018-00-1 CAS No: 556-67-2 CE No: 209-136-7 Registration No: 01-2119529238-36-XXXX	octamethylcyclotetrasiloxane	0 - 0.025 %	Aquatic Chronic 1, H410 (M=10) - Repr. 2, H361f	-
Index No: 603-001-00-X CAS No: 67-56-1 EC No: 200-659-6 Registration No: 01-2119433307-44-XXXX	[1] [2] methanol	0 - 3 %	Acute Tox. 3 *, H311 - Acute Tox. 3 *, H331 - Acute Tox. 3 *, H301 - Flam. Liq. 2, H225 - STOT SE 1, H370 **	STOT SE 1, H370: C ≥ 10 % STOT SE 2, H371: 3 % ≤ C < 10 %

(*)*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 European Union exposure limit in the workplace (see section 8.1).
[2] Substance with a national 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.

-Continued on next page.-

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.

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. Cover the affected area with a dry sterile bandage. Protect the affected area from pressure or friction.

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.
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. 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.

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 not classified as hazardous for the environment, avoid spillage as much as possible.

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 (see section 13).

-Continued on next page.-

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.
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 35 º 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).
None.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION.

8.1 Control parameters.
Work exposure limit for:

Name	CAS No.	Country	Limit value	ppm	mg/m³
propan-2-ol, isopropyl alcohol, isopropanol	67-63-0	United Kingdom [1]	**Eight hours**	400	999
			Short term	500	1250
		Éire [2]	**Eight hours**	200	
			Short term	400	
		United States [3] (Cal/OSHA)	**Eight hours**	400	
			Short term	500	
		United States [4] (NIOSH)	**Eight hours**	400	
			Short term	500	
		United States [5] (OSHA)	**Eight hours**	400	980
			Short term		
ethanol, ethyl alcohol	64-17-5	United Kingdom [1]	**Eight hours**	1000	1920
			Short term		
		Éire [2]	**Eight hours**		
			Short term	1000	
		United States [3] (Cal/OSHA)	**Eight hours**	1000	
			Short term		
		United States [4] (NIOSH)	**Eight hours**	1000	
			Short term		
		United States [5] (OSHA)	**Eight hours**	1000	1900
			Short term		
n-butyl acetate	123-86-4	United Kingdom [1]	**Eight hours**	150	724
			Short term	200	966
		Éire [2]	**Eight hours**	150	710
			Short term	200	950

-Continued on next page.-

		United States [3] (Cal/OSHA)	**Eight hours**	150	
			Short term	200	
		United States [4] (NIOSH)	**Eight hours**	150	
			Short term	200	
		United States [5] (OSHA)	**Eight hours**	150	710
			Short term		
methanol	67-56-1	European Union [6]	**Eight hours**	200 (skin)	260 (skin)
			Short term		
		United Kingdom [1]	**Eight hours**	200	266
			Short term	250	333
		Éire [2]	**Eight hours**	200	260
			Short term		
		United States [3] (Cal/OSHA)	**Eight hours**	200	
			Short term	250 (Ceiling) 1000	
		United States [4] (NIOSH)	**Eight hours**	200	
			Short term	250	
		United States [5] (OSHA)	**Eight hours**	200	260
			Short term		

[1] According Limit Value (IOELV) list in 2nd Indicative Occupational Exposure adobted by Health and Safety Executive.
[2] According Code of Practice for the Safety, Health and Welfare at Work (Chemicals Agents) Regulations adopted by Health and Safety Authority (HSA).
[3] California Division of Occupational Safety and Health (Cal/OSHA) Permissible Exposure Limits (PELs).
[4] 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.
[5] 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).
[6] 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).
The product does NOT contain substances with Biological Limit Values.

Concentration levels DNEL/DMEL:

Name	DNEL/DMEL	Type	Value
propan-2-ol, isopropyl alcohol, isopropanol CAS No: 67-63-0 EC No: 200-661-7	DNEL (Workers)	Inhalation, Chronic, Systemic effects	500 (mg/m³)
	DNEL (Consumers)	Inhalation, Chronic, Systemic effects	89 (mg/m³)
	DNEL (Workers)	Dermal, Chronic, Systemic effects	888 (mg/kg bw/day)
	DNEL (Consumers)	Dermal, Chronic, Systemic effects	319 (mg/kg bw/day)
	DNEL (Consumers)	Oral, Chronic, Systemic effects	26 (mg/kg bw/day)
ethanol, ethyl alcohol CAS No: 64-17-5 EC No: 200-578-6	DNEL (Workers)	Inhalation, Chronic, Systemic effects	950 (mg/m³)
n-butyl acetate CAS No: 123-86-4 EC No: 204-658-1	DNEL (Workers)	Inhalation, Chronic, Systemic effects	480 (mg/m³)
	DNEL (Consumers)	Inhalation, Chronic, Systemic effects	102,34 (mg/m³)
	DNEL (Workers)	Inhalation, Short term, Systemic effects	960 (mg/m³)
	DNEL (Consumers)	Inhalation, Short term, Systemic effects	859,7 (mg/m³)
	DNEL (Workers)	Inhalation, Chronic, Local effects	480 (mg/m³)
	DNEL (Consumers)	Inhalation, Chronic, Local effects	102,34 (mg/m³)
	DNEL (Workers)	Inhalation, Short term, Local effects	960 (mg/m³)
	DNEL (Consumers)	Inhalation, Short term, Local effects	859,7 (mg/m³)

-Continued on next page.-

	DNEL (Consumers)	Oral, Chronic, Systemic effects	3,4 (mg/kg bw/day)
	DNEL (Consumers)	Dermal, Chronic, Systemic effects	3,4 (mg/kg bw/day)
methanol CAS No: 67-56-1 EC No: 200-659-6	DNEL (Workers)	Inhalation, Chronic, Local effects	260 (mg/m³)
	DNEL (Consumers)	Inhalation, Chronic, Local effects	50 (mg/m³)
	DNEL (Workers)	Inhalation, Chronic, Systemic effects	260 (mg/m³)
	DNEL (Consumers)	Inhalation, Chronic, Systemic effects	50 (mg/m³)
	DNEL (Workers)	Dermal, Chronic, Systemic effects	40 (mg/kg bw/day)
	DNEL (Consumers)	Dermal, Chronic, Systemic effects	8 (mg/kg bw/day)
	DNEL (Workers)	Dermal, Short term, Systemic effects	40 (mg/kg bw/day)
	DNEL (Consumers)	Dermal, Short term, Systemic effects	8 (mg/kg 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
propan-2-ol, isopropyl alcohol, isopropanol CAS No: 67-63-0 EC No: 200-661-7	aqua (freshwater)	140,9 (mg/L)
	aqua (marine water)	140,9 (mg/L)
	aqua (intermittent releases)	140,9 (mg/L)
	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)
ethanol, ethyl alcohol CAS No: 64-17-5 EC No: 200-578-6	Fresh water	0,96 (mg/L)
	Marine water	0,79 (mg/L)
	aqua (intermittent releases)	2,75 (mg/L)
	Soil	0,63 (mg/kg soil dw)
	sediment (freshwater)	3,6 (mg/kg sediment dw)
n-butyl acetate CAS No: 123-86-4 EC No: 204-658-1	aqua (freshwater)	0,18 (mg/l)
	aqua (marine water)	0,018 (mg/l)
	aqua (intermittent releases)	0,36 (mg/l)
	STP	35,6 (mg/l)
	sediment (freshwater)	0,981 (mg/kg sediment dw)
	sediment (marine water)	0,0981 (mg/kg sediment dw)
methanol CAS No: 67-56-1 EC No: 200-659-6	aqua (freshwater)	20,8 (mg/L)
	aqua (marine water)	2,08 (mg/L)
	aqua (intermittent releases)	1540 (mg/L)
	STP	100 (mg/L)
	sediment (freshwater)	77 (mg/kg sediment dw)
	sediment (marine water)	7,7 (mg/kg sediment dw)
	soil	3,18 (mg/kg soil dw)

-Continued on next page.-

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. Individual protection measures, such as personal protective equipment As a preventative measure it is recommended to use basic Personal Protective Equipment, in accordance with Regulation (EU) 2016/425. For more information on Personal Protective Equipment (storage, use, cleaning, maintenance, class of protection,...) consult the information leaflet provided by the manufacturer. For more information see subsection 7.1. All information contained herein is a recommendation which needs some specification from the labour risk prevention services as it is not known whether the company has additional measures at its disposal.

Respiratory protection
The use of protection equipment will be necessary if a mist forms or if the occupational exposure limits are exceeded. Replace the filter when smell or taste of the contaminant is detected inside the mask or facepiece.

Specific protection for the hands
Replace the gloves at any sign of deterioration. For prolonged periods of exposure to the product for professional/industrial users, the use of CE III gloves is recommended, in accordance with EN 420 and EN 374 standards.

Clothing:
Clothing, including boots, gloves, lab coat, apron or coveralls, should be worn whenever there is a possibility of skin contact. Wash hands before work breaks and after work is finished. Change contaminated clothing.

Additional emergency measures
Emergency shower: ANSI Z358-1, ISO 3864-1:2011, ISO 3864-4:2011
Eyewash stations: DIN 12 899, ISO 3864-1:2011, ISO 3864-4:2011

Concentration:	**100 %**				
Uses:	**Professional use** **Nanoparticle-based hydrophobic coating for facades**				
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.				
Characteristics:	«CE» marking, category II.				
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:	Face shield.				
Characteristics:	«CE» marking, category II. Face and eye protector against splashing liquid.				

-Continued on next page.-

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. Make sure that mobile parts move smoothly.
Observations:	Face shields should offer a field of vision with a dimension in the central line of, at least, 150 mm vertically once attached to the frame.
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.





Advice on personal protection is valid for high levels of exposure.
Choose personal protection adapted to the risks of exposure.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES.

9.1 Information on basic physical and chemical properties.
Physical state: Liquid
Colour: Colourless, translucent
Odour: Characteristic alcohol
Odour threshold: Not applicable/Not available due to the nature/properties of the product
Melting point: Not applicable/Not available due to the nature/properties of the product
Freezing point: Not applicable/Not available due to the nature/properties of the product
Boiling point or initial boiling point and boiling range: 81 ºC (Estimation based on the indication of the Regulation (CE) Nº1272/2008.)
Flammability: Not applicable/Not available due to the nature/properties of the product
Lower explosion limit: Not applicable/Not available due to the nature/properties of the product
Upper explosion limit: Not applicable/Not available due to the nature/properties of the product
Flash point: 12 ºC
Auto-ignition temperature: Not applicable/Not available due to the nature/properties of the product
Decomposition temperature: Not applicable/Not available due to the nature/properties of the product
pH: 3.5 – 4.0
Kinematic viscosity: Not applicable/Not available due to the nature/properties of the product
Solubility: Not applicable/Not available due to the nature/properties of the product
Hydrosolubility: Not applicable/Not available due to the nature/properties of the product
Liposolubility: Not applicable/Not available due to the nature/properties of the product
Partition coefficient n-octanol/water (log value): Not applicable/Not available due to the nature/properties of the product
Vapour pressure: 54,029 (Estimation based on the indication of the Regulation (CE) Nº1272/2008.)
Absolute density: Not applicable/Not available due to the nature/properties of the product
Relative density: 0,794 (Estimation based on the indication of the Regulation (CE) Nº1272/2008.)
Relative vapour density: Not applicable/Not available due to the nature/properties of the product
Particle characteristics: Typical values are given for the size of nanoparticles present in the product: 10-50 nm.

9.2 Other information
Information with regard to physical hazard classes
Flammable liquids:
Sustained combustibility: Yes.

SECTION 10: STABILITY AND REACTIVITY.

-Continued on next page.-

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 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.

11.1 Information on hazard classes as defined in Regulation (EC) Nº 1272/2008.
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			
	Type	Test	Kind	Value
propan-2-ol, isopropyl alcohol, isopropanol CAS No: 67-63-0 EC No: 200-661-7	Oral	LD50	Rat	5050 mg/kg bw [1] [1] Gigiena i Sanitariya. For English translation, see HYSAAV. Vol. 43(1), Pg. 8, 1978
	Dermal	LD50	Rabbit	12800 mg/kg bw [1] [1] Raw Material Data Handbook, Vol.1: Organic Solvents, 1974. Vol. 1, Pg. 100, 1974
	Inhalation	LC50	Rat	>10000 ppm (6 h) [1] [1] OECD Guideline 403 (Acute Inhalation Toxicity), study report, 1991
n-butyl acetate CAS No: 123-86-4 EC No: 204-658-1	Oral	LD50	Rat	10800 mg/kg bw [1] [1] Acute Toxicity Data. Journal of the American College of Toxicology, Part B. Vol. 1, Pg. 196, 1992
	Dermal	LD50	Rabbit	>17600 mg/kg bw [1] [1] Raw Material Data Handbook, Vol.1: Organic Solvents, 1974. Vol. 1, Pg. 7, 1974
	Inhalation	LC50	Rat	1.85 mg/l/4 h [1] [1] Inhalation Toxicology. Vol. 9, Pg. 623, 1997
methanol	Oral	LD50	Rat	5630 mg/kg bw [1]

-Continued on next page.-

CAS No: 67-56-1 EC No: 200-659-6		[1] Gigiena Truda i Professional'nye Zabolevaniya. Labor Hygiene and Occupational Diseases. Vol. 19(11), Pg. 27, 1975
	Dermal	LD50 Rabbit 15800 mg/kg bw [1] [1] Raw Material Data Handbook, Vol.1: Organic Solvents, 1974. Vol. 1, Pg. 74, 1974
	Inhalation	LC50 Rat 83.9 mg/l (4 h) [1] [1] Raw Material Data Handbook, Vol.1: Organic Solvents, 1974. Vol. 1, Pg. 74, 1974

a) acute toxicity;
Not conclusive data for classification.

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

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;
Not conclusive data for classification.

j) aspiration hazard;
Not conclusive data for classification.

11.2 Information on other hazards.
Endocrine disrupting properties
This product does not contain components with endocrine-disrupting properties with effects on human health.
Other information
There is no information available on other adverse health effects.

SECTION 12: ECOLOGICAL INFORMATION.

12.1 Toxicity.

Name	Ecotoxicity			
	Type	Test	Kind	Value
propan-2-ol, isopropyl alcohol, isopropanol	Fish	LC50	Fish	9640 mg/l (96 h) [1] [1] Brooke, L.T., D.J. Call, D.L. Geiger, and C.E. Northcott 1984. Acute Toxicities of Organic Chemicals to Fathead Minnows (Pimephales promelas), Vol. 1. Center for Lake Superior Environmental Stud., Univ.of Wisconsin-Superior, Superior, WI :414
	Aquatic	LC50	Crustacean	1400 mg/l (48 h) [1]

-Continued on next page.-

	invertebrates	[1] Blackman, R.A.A. 1974. Toxicity of Oil-Sinking Agents. Mar.Pollut.Bull. 5:116-118
CAS No: 67-63-0 EC No: 200-661-7	Aquatic plants	Toxicity threshold Scenedesmus quadricauda 1800 mg/L (7 d) [1] [1] Comparison of the Toxicity Thresholds of Water Pollutants to Bacteria, Algae, and Protozoa in the Cell Multiplication Inhibition Test, Water Research Vol. 14. pp. 231 to 241
n-butyl acetate	Fish	LC50 Fish 81 mg/l (96 h) [1] [1] Wellens, H. 1982. Comparison of the Sensitivity of Brachydanio rerio and Leuciscus idus by Testing the Fish Toxicity of Chemicals and Wastewaters. Z.Wasser-Abwasser-Forsch. 51(2):49-52 (GER) (ENG ABS). Dawson, G.W., A.L. Jennings, D. Drozdowski, and E. Rider 1977. The Acute Toxicity of 47 Industrial Chemicals to Fresh and Saltwater Fishes. J.Hazard.Mater. 1(4):303-318 (OECDG Data File)
	Aquatic invertebrates	EC50 Daphnia sp. 44 mg/l (48 h) [1] [1] publication, 1959
CAS No: 123-86-4 EC No: 204-658-1	Aquatic plants	EC50 Desmodesmus subspicatus (reported as Scenedesmus subspicatus) 674.7 mg/l (72 h) [1] [1] Method: other: algae growth inhibition test, according to Umweltbundesamt (German Federal Environment Agency) (proposal/draft, version February 1984)
methanol	Fish	LC50 Trachinotus carolinus 10112 mg/L (24 h) [1] [1] Baltz, D. M. et al., Transactions of the American Fisheries Society 134: 730-740, 2005
	Aquatic invertebrates	EC50 Daphnia magna 20803 mg/L (24 h) [1] [1] Environmental Toxicology and Chemistry 14(12): 2085-2088, 1995
CAS No: 67-56-1 EC No: 200-659-6	Aquatic plants	EC50 Selenastrum capricornutumc 22000 mg/L (96 h) [1] [1] Ecotoxicology and Environmental Safety 71: 166-1711, 2008

12.2 Persistence and degradability.
No information is available regarding the biodegradability of the substances present.
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
propan-2-ol, isopropyl alcohol, isopropanol CAS No: 67-63-0 EC No: 200-661-7	0,05	-	-	Very low
ethanol, ethyl alcohol CAS No: 64-17-5 EC No: 200-578-6	-0,3	-	-	Very low

-Continued on next page.-

n-butyl acetate CAS No: 123-86-4 EC No: 204-658-1	1,78	-	-	Very low
methanol CAS No: 67-56-1 EC No: 200-659-6	-0,74	-	-	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 Endocrine disrupting properties.
This product doesn't contain components with environmental endocrine disrupting properties.

12.7 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
Air: Transport by plane: ICAO/IATA.
Transport document: Airway bill.

14.1 UN number or ID number.
UN No: UN1993

14.2 UN proper shipping name.
Description:
ADR/RID: UN 1993, FLAMMABLE LIQUID, N.O.S. (CONTAINS PROPAN-2-OL ISOPROPYL ALCOHOL ISOPROPANOL / ETHANOL ETHYL ALCOHOL), 3, PG II, (D/E)
IMDG: UN 1993, FLAMMABLE LIQUID, N.O.S. (CONTAINS PROPAN-2-OL ISOPROPYL ALCOHOL ISOPROPANOL / ETHANOL ETHYL ALCOHOL), 3, PG II (12ºC)
ICAO/IATA: UN 1993, FLAMMABLE LIQUID, N.O.S. (CONTAINS PROPAN-2-OL ISOPROPYL ALCOHOL ISOPROPANOL / ETHANOL ETHYL ALCOHOL), 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
Transport by ship, FEm – Emergency sheets (F – Fire, S - Spills): F-E,S-E

-Continued on next page.-

14.6 Special precautions for user.
Labels: 3



Hazard number: 33
ADR LQ: 1 L
IMDG LQ: 1 L
ICAO LQ: 1 L

Provisions concerning carriage in bulk ADR: Not authorized carriage in bulk in accordance with ADR.
Proceed in accordance with point 6.

14.7 Maritime transport in bulk according to IMO instruments.
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.
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.
Kind of pollutant to water (Germany): WGK 2: Hazardous to 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.
H301	Toxic if swallowed.
H311	Toxic in contact with skin.
H319	Causes serious eye irritation.
H331	Toxic if inhaled.
H336	May cause drowsiness or dizziness.
H361f	Suspected of damaging fertility.
H370	Causes damage to organs.
H371	May cause damage to organs.
H410	Very toxic to aquatic life with long lasting effects.

Classification codes:
Acute Tox. 3 : Acute toxicity (Dermal), Category 3
Acute Tox. 3 : Acute toxicity (Inhalation), Category 3
Acute Tox. 3 : Acute toxicity (Oral), Category 3
Aquatic Chronic 1 : Chronic effect to the aquatic environment, Category 1
Eye Irrit. 2 : Eye irritation, Category 2
Flam. Liq. 2 : Flammable liquid, Category 2
Flam. Liq. 3 : Flammable liquid, Category 3
Repr. 2 : Reproductive toxicant, Category 2
STOT SE 1 : Specific target organ toxicity following a single exposure, Category 1
STOT SE 3 : Specific target organ toxicity following a single exposure, Category 3

Changes regarding to the previous version:

-Continued on next page.-

- Changes in the information of the supplier (SECTION 1.3).
- Change in the emergency number (SECTION 1.4).
- Modification of specific hazards (SECTION 2.3).
- Changes in the composition of the product (SECTION 3.2).
- Changes in the composition of the product (SECTION 3.2).
- Modification in the firefighting measures (SECTION 5.2).
- Modifications in the accidental release measures (SECTION 6.1).
- Addition of exposure data (SECTION 8.1).
- Modification of exposure data (SECTION 8.1).
- Modification of exposure controls (SECTION 8.2).
- Modification in the values of the physical and chemical properties (SECTION 9).
- Addition of ecotoxicity values (SECTION 11.1).
- Modification of toxicity values (SECTION 11.1).
- Change in the hazard classification (SECTION 11.1).
- Addition of ecological information values (SECTION 12.1).
- Modification of ecological information values (SECTION 12.1).
- Addition of ecological information values (SECTION 12.3).
- Modification of ecological information values (SECTION 12.3).
- Modification of the classification ADR/IMDG/ICAO/IATA/RID (SECTION 14).
- National legislative changes (SECTION 15.1).
- Elimination of abbreviations and acronyms (SECTION 16).
- Addition of abbreviations and acronyms (SECTION 16).

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/RID:	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%.
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) 2020/878.
Regulation (EC) No 1907/2006.
Regulation (EC) No 1272/2008.

The information given in this Safety Data Sheet has been drafted in accordance with 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 on the Registration, Evaluation, Authorisation and Restriction of Chemical substances and mixtures (REACH).

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.