(in accordance with Regulation (EU) 2020/878)

# **Polyvinyl alcohol**

Version 1 Date of compilation: 18/10/2023



Page 1 of 14 Print date: 20/10/2023

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

#### 1.1 Product identifier.

Product Name: Polyvinyl alcohol

Product Code: ALQ0013

Chemical Name: Acetic Acid Ethenyl Ester co-Polymer with Ethenol

CAS No: 25213-24-5 EC No: 607-648-9 Molecular formula:  $(C_4H_6O_2.C_2H_4O)x$ Purity: 92 - 95 % Registration No: Exempt Product type: Polymer

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

Chemical intermediates (including monomers).

Auxiliary agents for leather. Auxiliary product for textiles.

Packaging. Surfactant.

Manufacture of adhesives.

Food industry.

#### Uses advised against:

All uses not specified in this section or in section 7.3. Due to lack of experience or data, the supplier cannot approve other unspecified use.

#### 1.3 Details of the supplier of the safety data sheet.

**ALQUERA CIENCIA SL** Company:

Address: C/ Vilar de Donas 9 City: 28050 - Madrid Province: Madrid (Spain) Telephone: 0034 620 88 75 97 E-mail: info@alguera.com Web: https://www.alquera.com

1.4 Emergency telephone number: 0034 620 88 75 97 (SDS) (Only available during office hours; Monday-Friday; 09:00-

18:00)

### **SECTION 2: HAZARDS IDENTIFICATION.**

#### 2.1 Classification of the substance or mixture.

The product is not classified as hazardous within the meaning of Regulation (EC) No 1272/2008.

#### 2.2 Label elements.

The product is not classified as dangerous according to Regulation (CE) No 1272/2008.

#### 2.3 Other hazards.

The substance is not PBT.

The substance is not vPvB.

The product does not meet the criteria to be considered PBT or vPvB according to Regulation (EC) No. 1907/2006 (REACH), Annex XIII  $\geq$  0.1%.

Substance does not have endocrine disrupting properties  $\geq 0.1\%$ .

Dustiness.

Dust explosion hazards. May form explosible dust-air mixture if dispersed.

PBT: Persistent Bioaccumulative and Toxic. vPvB: very Persistent and very Bioaccumulative.

(in accordance with Regulation (EU) 2020/878)

# **Polyvinyl alcohol**

Version 1 Date of compilation: 18/10/2023



Page 2 of 14 Print date: 20/10/2023

### **SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS.**

#### 3.1 Substances.

**Description**: vinyl alcohol polymer with vinyl acetate.

Chemical Name: Acetic Acid Ethenyl Ester co-Polymer with Ethenol

CAS No: 25213-24-5 EC No: 607-648-9 Molecular formula:  $(C_4H_6O_2.C_2H_4O)x$  Purity: 92 - 95 %

			(*)Classification - Regulation (EC) No 1272/2008		
Identifiers	Name	Concentration	Classification	Specifics concentration limits and Acute toxicity estimate	
CAS No: 25213-24-5 EC No: 607-648-9	Acetic Acid Ethenyl Ester co-Polymer with Ethenol	92 - 95 %	-	-	

**Impurities or additives:** 

Identifiers	Name		(*)Classification - Regulation (EC) No 1272/2008	
		Concentrate	Classification	Specifics concentration limits and Acute toxicity estimate
Index No: 603-001-00-X CAS No: 67-56-1 EC No: 200-659-6	methanol	0 - 0.9 %	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 %
Index No: 607-021-00-X CAS No: 79-20-9 EC No: 201-185-2	methyl acetate	0 - 0.9 %	Eye Irrit. 2, H319 - Flam. Liq. 2, H225 - STOT SE 3, H336	-

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

#### 3.2 Mixtures.

Not applicable.

### **SECTION 4: FIRST AID MEASURES.**

#### 4.1 Description of first aid measures.

Due to the composition and type of the substances present in the product, no particular warnings are necessary.

#### Inhalation.

If breathing stops, seek emergency medical attention. Take the victim into open air; keep them warm and calm. If breathing is irregular or stops, perform artificial respiration.

#### **Eve 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 20 minutes while pulling eyelids up and seek medical assistance. Do not let the person to rub the affected eye.

### Skin contact.

Remove contaminated clothing.

# Ingestion.

Keep calm. NEVER induce vomiting.

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

(in accordance with Regulation (EU) 2020/878)

# **Polyvinyl alcohol**

Version 1 Date of compilation: 18/10/2023



Page 3 of 14 Print date: 20/10/2023

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

No known acute or delayed effects from exposure to the product.

#### 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.**

#### 5.1 Extinguishing media.

#### Suitable extinguishing media:

Extinguisher powder or CO<sub>2</sub>. 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.

Hazardous combustion products:

carbon monoxide (CO), carbon dioxide (CO2), gas / toxic vapor.

#### 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.

#### 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.

## **SECTION 6: ACCIDENTAL RELEASE MEASURES.**

## 6.1 Personal precautions, protective equipment and emergency procedures.

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

Ventilate the affected area.

Dust control. Prevention of ignition sources.

Do not breathe dust. Do not breathe vapours.

Avoid contact with eyes and skin.

#### 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 mechanically collect the spillage, clean up 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).

#### 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 product does not require special handling measures, the following general measures are recommended:

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.

(in accordance with Regulation (EU) 2020/878)

# **Polyvinyl alcohol**

Version 1 Date of compilation: 18/10/2023



Page 4 of 14 Print date: 20/10/2023

#### 7.2 Conditions for safe storage, including any incompatibilities.

The product does not require special storage measures. As general storage measures, sources of heat, radiation, electricity and contact with food should be avoided.

Keep away from oxidizing agents and from highly acidic or alkaline materials.

Store the containers between 5 and 30 ° C, in a dry and well-ventilated place.

Store according to local legislation. Observe indications on the label. Once the containers are open, they must be carefully closed and placed vertically to prevent spills.

### Specific indications/details

Layers, deposits, and accumulations of flammable dust must be treated like any other source capable of forming hazardous explosive atmospheres.

Dust deposits can accumulate on any surface in a work area.

Dust explosion hazard.

#### **Explosive atmospheres**

Removal of dust deposits.

For the removal of combustible dusts, use only vacuum cleaners designed in such a way that they cannot be a source of ignition.

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

#### 7.3 Specific end use(s).

Except for the instructions already specified it is not necessary to provide any special recommendation regarding the uses of this product. See section 1.2.

# **SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION.**

#### 8.1 Control parameters.

Nuisance dust: Inhalable dust 10 mg/m<sup>3</sup> // Respirable dust 4 mg/m<sup>3</sup>

The environmental limit value for general dust (INSST, Spain) is:

- VLA-ED particles not otherwise specified. Inhalable fraction 10 mg/m<sup>3</sup>
- VLA-ED Particulates not otherwise specified. Respirable fraction 3 mg/m<sup>3</sup>

This is a dusty product. The workplace exposure limit for dust (USA-OSHA) is:

8-hour TWA inhalable dust: 10 mg/m<sup>3</sup>
8-hour TWA respirable dust: 5 mg/m<sup>3</sup>

The product does NOT contain substances with Biological Limit Values.

Work exposure limit for:

Name	CAS No.	Country	Limit value	ppm	mg/m³
mothanal	67-56-1	European	Eight hours	200 (skin)	260 (skin)
methanol	07-30-1	Union [1]	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).

Concentration levels DNEL/DMEL:

Name	DNEL/DMEL	Туре	Value
	DNEL (Workers)	Inhalation, Chronic, Systemic effects	130 (mg/m³)
	DNEL (Workers)	Inhalation, Short term, Systemic effects	130 (mg/m³)
methanol	DNEL (Workers)	Dermal, Chronic, Systemic effects	20 (mg/kg bw/day)
CAS No: 67-56-1 EC No: 200-659-6	DNEL (Workers)	Dermal, Short term, Systemic effects	20 (mg/kg bw/day)
20.10.200.000	DNEL (Consumers)	Inhalation, Chronic, Systemic effects	26 (mg/m <sup>3</sup> )
	DNEL (Consumers)	Inhalation, Short term, Systemic effects	26 (mg/m <sup>3</sup> )
	DNEL (Consumers)	Dermal, Chronic, Systemic effects	4 (mg/kg bw/day)

(in accordance with Regulation (EU) 2020/878)

# **Polyvinyl alcohol**

Version 1 Date of compilation: 18/10/2023



Page 5 of 14 Print date: 20/10/2023

			,
	DNEL	Dermal, Short term, Systemic effects	4 (mg/kg
	(Consumers)		bw/day)
	DNEL	Oral, Chronic, Systemic effects	4 (mg/kg
	(Consumers)		bw/day)
	DNEL	Oral, Short term, Systemic effects	4 (mg/kg
	(Consumers)		bw/day)
	DNEL	Inhalation, Chronic, Systemic effects	300
	(Workers)		(mg/m³)
	DNEL	Inhalation, Chronic, Systemic effects	64
	(Consumers)		(mg/m³)
	DNEL	Inhalation, Short term, Systemic effects	3777
	(Workers)	, ,	(mg/m³)
	DNEL	Inhalation, Short term, Systemic effects	3777
	(Consumers)	, , ,	(mg/m³)
	DNEL	Inhalation, Chronic, Local effects	620
	(Workers)	, ,	(mg/m³)
	DNEL	Inhalation, Chronic, Local effects	133
	(Consumers)		(mg/m³)
methyl acetate CAS No: 79-20-9	DNEL	Dermal, Chronic, Systemic effects	43 (mg/kg
EC No: 201-185-2	(Workers)	, , ,	pc/día)
EC NO: 201-185-2	DNEL	Dermal, Chronic, Systemic effects	21,5
	(Consumers)	, , ,	(mg/kg
	, ,		pc/día)
	DNEL	Dermal, Short term, Systemic effects	203
	(Consumers)	, ,	(mg/kg
	, ,		pc/día)
	DNEL	Oral, Chronic, Systemic effects	21,5
	(Consumers)		(mg/kg
	(		pc/día)
	DNEL	Oral, Short term, Systemic effects	203
	(Consumers)	, , , , , , , , , , , , , , , , , , , ,	(mg/kg
	( , , , ,		pc/día)

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)	20,8 (mg/L)
	aqua (marine water)	2,08 (mg/L)
	aqua (intermittent releases)	1540 (mg/L)
methanol	STP	100 (mg/L)
CAS No: 67-56-1	sediment (freshwater)	77 (mg/kg
CAS NO: 67-56-1 EC No: 200-659-6		sediment dw)
LC No. 200 033 0	sediment (marine water)	7,7 (mg/kg
		sediment dw)
	soil	3,18 (mg/kg
		soil dw)

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 protective equipment will be necessary in case of mist formation or in case of exceeding occupational exposure limits if they exist (see section 8.1). Wear respiratory protection in case of spray application/dust generation. Wear respiratory protection in case of prolonged exposure.

(in accordance with Regulation (EU) 2020/878)

# **Polyvinyl alcohol**

Version 1 Date of compilation: 18/10/2023



Page 6 of 14 Print date: 20/10/2023

#### Specific protection for the hands

Replace the gloves at any sign of deterioration. Penetration time >480 min (permanent contact protection). The breakthrough time of the selected gloves should be in accordance with the intended period of use. Various factors (e.g. temperature) mean that in practice the breakthrough time of chemical-resistant protective gloves is significantly shorter than the EN374 standard. An increase in temperature due to hot substances, body heat, etc. and a weakening of the effective thickness due to expansion can lead to a significant shortening of the breakthrough time. For the selection of a specific type of glove for a given application, with a certain duration, should take into account (but not be limited to) relevant factors in the workplace, such as: other chemicals to be handled, physical requirements (cut/puncture protection, dexterity, thermal protection), potential allergies to the glove material itself, etc.... Due to the wide variety of circumstances and possibilities, the instruction manual of the glove manufacturers should be taken into account. Gloves should be replaced immediately if signs of degradation are observed.

#### 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

#### Recommendations to prevent toxicological risks:

Do not eat, drink or smoke during handling. After handling, wash hands with soap and water.

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

Canaantuatian	100.0/
Concentration:	100 %
Uses:	Industrial use. Professional use. tion: If the recommended technical measures are observed, no individual protection equipment
is necessary.	non: If the recommended technical measures are observed, no individual protection equipment
PPE:	Particle filter mask
	«CE» marking, category III. Made of filtering material, it covers nose, mouth and
Characteristics:	chin.
CEN standards:	EN 149, EN 143
Maintenance:	Check for any tears, defects, etc. before use. Since it is disposable individual protection equipment, it should be replaced after use.
Observations:	Does not protect worker unless properly adjusted. Follow the manufacturer's instructions regarding suitable use of the equipment.
Filter Type needed:	P1 (white)
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:	Butyl/nitrile Breakthrough time (min.): Material thickness (mm): 0,11
Eye protection:	
PPE:	Protective goggles against particle impacts.
Characteristics:	«CE» marking, category II. Eye protector against dust and smoke.
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.

(in accordance with Regulation (EU) 2020/878)

# **Polyvinyl alcohol**

Version 1 Date of compilation: 18/10/2023



Page 7 of 14 Print date: 20/10/2023

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

The level of comfort during use and acceptability are factors that are assessed very differently depending

Observations: 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:

Physical state (20°C): Solid - Dust.

Colour: White.

Odour: soft, almost odorless.

Odour threshold: Not applicable/Not available due to the nature/properties of the product.

Volatility:

Boiling point or initial boiling point and boiling range: > 200°C (estimated).

Vapour pressure: N.A.

Relative vapour density (air=1): N.A.

Evaporation rate: N.A.

Flammability:

Flammability: this mixture is combustible, but not readily flammable.

Lower explosion limit: N.A. Upper explosion limit: N.A.

Flash point: N.A.

Auto-ignition temperature: N.A.

**Product description:** 

Melting point: 230-240 °C.

Freezing point: N.A.

Decomposition temperature: > 200°C. pH: 4.5-6.5 (20°C) (4% solution; 40 g/L). Dynamic viscosity: 45-55 cP (20°C, 4% solution)

Kinematic viscosity: Not applicable. Viscosity is only relevant for liquids.

Solubility: soluble in warm water. Hydrosolubility: soluble in warm water.

Liposolubility: N.A.

Partition coefficient n-octanol/water (log value): N.A.

Bulk density: 610-670 kg/m3.

Relative density (water=1): 1.10-1.31.

#### Particle characteristics:

Particle size: N.A.

N.A.= Not Available/Non- Applicable due to the nature of the product, not providing information property of its hazards.

#### 9.2 Other information:

Explosive properties: There are no chemical groups associated with explosive properties present, therefore, according to REACH, Annex VII, 7.11, column 2, the study is not necessary.

Oxidizing properties: non-oxidizing. Based on the chemical structure, the product is incapable of exothermically reacting with combustible materials. According to REACH, Annex VII, 7.13, column 2, the study does not need to be carried out.

Drop point: N.A. Scintillation: N.A. % Solids: ≥ 92 %

N.A.= Not Available/Non- Applicable due to the nature of the product, not providing information property of its hazards

The data corresponding to the product specifications can be found in the product technical data sheet. For further data on physical and chemical properties related to safety and environment, see sections 7 and 12.

(in accordance with Regulation (EU) 2020/878)

# **Polyvinyl alcohol**

Version 1 Date of compilation: 18/10/2023



Page 8 of 14 Print date: 20/10/2023

#### **SECTION 10: STABILITY AND REACTIVITY.**

#### 10.1 Reactivity.

The product does not present hazards by their reactivity under the recommended handling and storage conditions (see section 7).

#### 10.2 Chemical stability.

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

#### 10.3 Possibility of hazardous reactions.

Dust explosion hazard.

#### 10.4 Conditions to avoid.

Avoid any improper handling.

Avoid exposure to heat, open flames and any other source of ignition.

Do not smoke. Take precautionary measures against electrostatic discharges.

#### 10.5 Incompatible materials.

Keep away from oxidising agents and from highly alkaline or acidic materials to prevent exothermic reactions.

#### 10.6 Hazardous decomposition products.

No decomposition if used for the intended uses.

Hazardous combustion products: carbon monoxide (CO), carbon dioxide (CO<sub>2</sub>), gas / toxic vapor.

#### **SECTION 11: TOXICOLOGICAL INFORMATION.**

# 11.1 Information on hazard classes as defined in Regulation (EC) $N^{o}$ 1272/2008.

Toxicological information.

Name -	Acute toxicity				
Name	Туре	Test	Kind	Value	
	Oral	LD50	Rat	> 5000 mg/kg	
Acetic Acid Ethenyl Ester co-Polymer with Ethenol	Dermal				
CAS No: 25213-24-5 EC No:	Inhalation	LC50	Rat	> 20 mg/L (1 h )	
		LD50	Rat	5630 mg/kg bw [1]	
		LD50	Rat	1187-2769 mg/kg	
	Oral	[1] Gigiena Truda i Professional'nye Zabolevaniya. Labor Hygiene and Occupational Diseases. Vol. 19(11), Pg. 27, 1975			
methanol		LD50	Rabbit	15800 mg/kg bw [1]	
metianoi		LD50	Rabbit	17100 mg/kg bw [2]	
	Dermal	[1] Raw Material Data Handbook, Vol.1: Organic Solvents, 1974. Vol. 1, Pg. 74, 1974 [2] review article or handbook, 1981			
		LC50	Rat	83.9 mg/l (4 h) [1]	
		LC50	Rat	3 mg/L (4 h)	
CAS No: 67-56-1 EC No: 200-659-6	Inhalation	[1] Raw Material Data Handbook, Vol.1: Organic Solvents, 1974. Vol. 1, Pg. 74, 1974			
		LD50	Rat	> 5000 mg/kg bw [1]	
	Oral	LD50	Rat	6482 mg/kg	
		[1] Food	and Cosmetics T	oxicology. Vol. 17, Pg. 859, 1979	
methyl acetate		LD50	Rabbit	> 5000 mg/kg bw [1]	
metryi acetate	Dermal	LD0	Rat	2000 mg/kg	
		[1] Food	and Cosmetics T	oxicology. Vol. 17, Pg. 859, 1979	
		LC0	Rabbit	49.2 mg/L (4 h)	
	Inhalation	LC100	Rabbit	98.4 mg/L (4 h)	
CAS No: 79-20-9 EC No: 201-185-2					

(in accordance with Regulation (EU) 2020/878)

# **Polyvinyl alcohol**

Version 1 Date of compilation: 18/10/2023



Page 9 of 14 Print date: 20/10/2023

Product classification has been carried out using the conventional calculation method of Regulation (EC) No 1272/2008(CLP)/ extrapolation with similar products.

#### Products in powder form:

Exposure to airborne concentrations above legal or recommended exposure limits may cause irritation of the nose, throat or lungs.

Although the product is non-irritating, direct contact with eyes may cause discomfort characterized by tearing or redness from mechanical/abrasive contact.

Mechanical/abrasive skin contact may cause redness.

#### a) acute toxicity;

Not conclusive data for classification.

Acute Toxicity Estimate (ATE):

Substances:

ATE (Dermal): > 5000 mg/kg ATE (Oral): > 5000 mg/kg ATE (Inhalation): > 20 mg/L 4h

#### b) skin corrosion/irritation;

Not conclusive data for classification.

Mechanical/abrasive skin contact may cause redness.

#### c) serious eye damage/irritation;

Not conclusive data for classification.

Although the product is non-irritating, direct contact with eyes may cause discomfort characterized by tearing or redness from mechanical/abrasive contact.

### 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;

Not conclusive data for classification.

#### 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  $\geq 0.1\%$ .

#### **Other information**

There is no information available on other adverse health effects.

### **SECTION 12: ECOLOGICAL INFORMATION.**

Product classification has been carried out using the conventional calculation method of Regulation (EC) No 1272/2008(CLP)/ extrapolation with similar products.

(in accordance with Regulation (EU) 2020/878)

# **Polyvinyl alcohol**

Version 1 Date of compilation: 18/10/2023



Page 10 of 14 Print date: 20/10/2023

# 12.1 Toxicity.

	Ecotoxicity						
N	lame	Туре	Test	Kind	Value		
		Fish	LC50 LC50	Lepomis macrochirus Pimephales promelas)	> 10 000 mg/L (96 h ) > 40 000 mg/L (96 h )		
Acetic Acid Ethenyl Ethenol	Ester co-Polymer with	Aquatic invertebrates	LC50 EC50	daphnia magna daphnia magna	8300 mg/L (96 h ) [1] 8300 mg/L (48 h )		
CAS No: 25213-24-5	EC No:	Aquatic plants	[1] Acute. LC50	Ceriodaphnia dubia	7900 mg/L (48 h )		
		Fish	LC50 LC50 LC50	Trachinotus carolinus Fish Lepomis macrochirus	10112 mg/L (24 h) [1] 15400 mg/l (96 h) [2] 12700 mg/L (96 h ) [3]		
methanol			[1] Baltz, D. M. et al., Transactions of the American Fisheries Society 134: 730-740, 2005 [2] Study report, 1986. According to EPA-660/3-75-009, 1975 [3] Lepomis macrochirus				
		Aquatic invertebrates					
			EC50 EC50	Selenastrum capricornutumc Raphidocelis subcapitata	22000 mg/L (96 h) [1] 22000 mg/L (96 h) [2]		
CAS No: 67-56-1	EC No: 200-659-6	Aquatic plants	2008 [2] Study i	5,	nental Safety 71: 166-1711, ng to OECD Guideline 201		
			LC50 LC50	Fish Danio rerio	399 mg/L (96 h) [1] >=250-<=350 mg/L [2]		
		Fish	[1] Geiger 1985. Acut Minnows (	, D.L., C.E. Northcott, te Toxicities of Organ Pimephales promelas nviron.Stud., Univ.of WI:326 p.	, D.J. Call, and L.T. Brooke ic Chemicals to Fathead s), Vol. 2. Ctr.for Lake		
methyl acetate		Aquatic invertebrates	EC50	daphnia magna	1027 mg/L (48 h ) [1]		
		Aquatic plants	ErC50 NOEC	algae (Desmodesmus subspicatus) algae (Desmodesmus subspicatus)	> 120 mg/L (72 h ) [1] >120 mg/L (72 h ) [2]		
CAS No: 79-20-9	EC No: 201-185-2		[1] OECD :	201 c. OECD 201 (ECHA)			

(in accordance with Regulation (EU) 2020/878)

# **Polyvinyl alcohol**

Version 1 Date of compilation: 18/10/2023



Page 11 of 14 Print date: 20/10/2023

#### 12.2 Persistence and degradability.

Information about biodegradability:

	Biodegradability					
Name	Conditions	Initial conc.	% degradation	Parameter	Period	
Acetic Acid Ethenyl Ester co-Polymer with Ethenol			90	%		
CAS No: 25213-24-5	OECD 302B					
methanol	Aerobic	•	95	%	20 d	
CAS No: 67-56-1 EC No: 200-659-6						
methyl acetate	Aerobic		75	%	19 d	
CAS No: 79-20-9 EC No: 201-185-2						

Not PBT product (Persistent, Bioaccumulative and Toxic) or vPvB (very Persistent and very Bioaccumulative).

#### 12.3 Bioaccumulative potential.

Information about the bioaccumulation.

Name		Bioaccumulation				
		Log Pow	BCF	NOECs	Level	
methanol		-0.77	3	_	Very low	
CAS No: 67-56-1	EC No: 200-659-6	-0.77	5	-	very low	
methyl acetate		0.10			Vandlau	
CAS No: 79-20-9	EC No: 201-185-2	0.18	-	-	Very low	
Product			< 19			

#### 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.

Not PBT Substance (Persistent, Bioaccumulative and Toxic) or vPvB (very Persistent and very Bioaccumulative), according to assessment made in the Chemical Safety Report, substance does not meet criteria to be considered PBT or vPvB.

#### 12.6 Endocrine disrupting properties.

This product doesn't contain components with environmental endocrine disrupting properties  $\geq 0.1\%$ .

### 12.7 Other adverse effects.

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.

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.

#### Waste management (disposal and evaluation):

Consult the authorized waste service manager on the assessment and disposal operations. In case the container has been in direct contact with the product, it will be processed the same way as the actual product. Otherwise, it will be processed as non-dangerous residue. We do not recommended disposal down the drain. See section 6.2.

(in accordance with Regulation (EU) 2020/878)

# **Polyvinyl alcohol**

Version 1 Date of compilation: 18/10/2023



Page 12 of 14 Print date: 20/10/2023

#### Regulations related to waste management:

In accordance with Annex II of Regulation (EC) No 1907/2006 (REACH) the community or state provisions related to waste management are stated Community legislation:

Follow the provisions of Directive 2008/98/EC, Decision 2014/955/UE, Directive (UE) 2018/851, Directive (UE) 2019/904 regarding waste management. EU-legislation: Regulation (EU) No. 1357/2014 and modifications.

It is not possible to assign a specific code, as it depends on the user's intended use.

#### **SECTION 14: TRANSPORT INFORMATION.**

Transportation is not dangerous. In case of road accident causing the product's spillage, proceed in accordance with point 6.

#### 14.1 UN number or ID number.

Transportation is not dangerous.

#### 14.2 UN proper shipping name.

Description:

ADR/RID: Not classified as hazardous for transport. IMDG: Not classified as hazardous for transport. ICAO/IATA: Not classified as hazardous for transport.

#### 14.3 Transport hazard class(es).

Transportation is not dangerous.

#### 14.4 Packing group.

Transportation is not dangerous.

#### 14.5 Environmental hazards.

Transportation is not dangerous.

Transport by ship, FEm – Emergency sheets (F – Fire, S - Spills): Not applicable.

#### 14.6 Special precautions for user.

Transportation is not dangerous.

#### 14.7 Maritime transport in bulk according to IMO instruments.

Not classified as hazardous for transport.

#### **SECTION 15: REGULATORY INFORMATION.**

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

Volatile organic compound (VOC)

VOC content (p/p):  $\leq 1 \%$ 

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 1: Slightly hazardous to water. (Autoclassified according to the AwSV Regulations) Substances included in Annex XIV of REACH (authorisation list) and expiry date: Not relevant.

SVHC substances candidate for inclusion in Annex XIV of Regulation (EC) No 1907/2006: Not relevant.

Substances restricted by the REACH regulation Annex XVII:

methanol R69, R3, R40

methyl acetate R3, R40, R75

Directive on the Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment (RoHS):Not listed. Regulation on the marketing and use of explosives precursors: Not listed.

Regulation on drug precursors: Not listed.

Persistent Organic Pollutants (POPs) Regulations: Not listed.

# Special provisions for the protection of humans or the environment:

It is recommended to use the information compiled in this safety data sheet as input data in a risk assessment of the local circumstances to establish the necessary risk prevention measures for the handling, use, storage and disposal of the product.

#### 15.2 Chemical safety assessment.

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

(in accordance with Regulation (EU) 2020/878)

# **Polyvinyl alcohol**

Version 1 Date of compilation: 18/10/2023



Page 13 of 14 Print date: 20/10/2023

#### **SECTION 16: OTHER INFORMATION.**

#### Legislation related to safety data sheets:

The Safety Data Sheet shall be supplied in an official language of the country where the product is placed on the market. This safety data sheet has been designed in accordance with ANNEX II-Guide to the compilation of safety data sheets of Regulation (EC) No 1907/2006 (COMMISSION REGULATION (EU) 2020/878).

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

H225 Highly 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. H370 Causes damage to organs. H371 May cause damage to organs.

#### 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
Eye Irrit. 2: Eye irritation, Category 2
Flam. Liq. 2: Flammable liquid, 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

# 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 recommended that the product only be employed for the purposes advised.

Abbreviations and acronyms used:

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.

IARC: International Agency for Research on Cancer

PPE: Personal protection equipment. 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.

SDS: Safety Data Sheet. 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).

(in accordance with Regulation (EU) 2020/878)

# **Polyvinyl alcohol**

Version 1 Date of compilation: 18/10/2023



Page 14 of 14 Print date: 20/10/2023

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.