67710 Polyvinyl Alcohol (PVA), liquid

1. Identification of the Substance/Mixture and of the Company/Undertaking

1. 1. Product Identifier

Product Name:	*Polyvinyl Alcohol (PVA), liquid*
Article No.:	*67710*
UFI:	*--*

1. 2. Relevant identified Uses of the Substance or Mixture and Uses advised against

Identified uses:

Industrial use
Additive, adhesive, binder, coatings, protective colloid, dispersion aids, raw material

Uses advised against:

1. 3. Details of the Supplier of the Safety Data Sheet (Producer/Importer)

Company:	*Kremer Pigmente GmbH & Co. KG*
Address:	*Hauptstr. 41-47, 88317 Aichstetten, Germany*
Tel./Fax.:	*Tel +49 7565 914480, Fax +49 7565 1606*
Internet:	*www.kremer-pigmente.com*
EMail:	*info@kremer-pigmente.com*
Importer:	*--*

1. 4. Emergency No.

Emergency No.:	*+49 7565 914480 (Mon-Fri 8:00 - 17:00)*

1. 4. 2 Poison Center:

2. Hazards Identification

2. 1. Classification of the Substance or Mixture

Classification according to Regulation (EC) No. 1272/2008 (CLP/GHS)

This product does not require classification and labelling as hazardous according to CLP/GHS.

Possible Environmental Effects:

2. 2. Label Elements

Classification according to Regulation (EC) No. 1272/2008 (CLP/GHS)

This product does not require classification and labelling as hazardous according to CLP/GHS.

Hazard designation:

Not applicable.

Signal word:

Hazard designation:

Safety designation:

Hazardous components for labelling:

Other Hazards

2. 3.

Dust can form an explosive mixture with air.

3. Composition/Information on Ingredients

3. 1. Substance

3. 2. Mixture

Chemical Characterization: *Polyvinyl alcohol 15 %, dissolved in demineralized water*

Information on Components / Hazardous Ingredients:

Polyvinyl alcohol, completely saponified	> 94 %	CAS-Nr: 9002-89-5 EINECS-Nr: EC-Nr:
Methanol (H225-301-311-331-370); REACH Reg.-No. 05-2119433307-44-xxxx	< 3 %	CAS-Nr: 67-56-1 EINECS-Nr: 200-659-6 EC-Nr: 603-001-00-X
Methyl acetate (H225-319-336); REACH Reg.-Nr. 01-2119459211-47-xxxx	< 2 %	CAS-Nr: 79-20-9 EINECS-Nr: 201-185-2 EC-Nr: 607-021-00-X

Additional information:

4. First Aid Measures

4. 1. Description of the First Aid Measures

General information:

Seek medical attention in case of complaints.

After inhalation:

Supply fresh air. Consult physician if symptoms persist.

After skin contact:

Wash with soap and rinse with plenty of water.
If symptoms persist, consult a physician.

After eye contact:

Rinse open eye for several minutes under running water. Should irritation continue, seek medical advice.

After ingestion:

Rinse mouth with plenty of water.
After swallowing larger amount of product seek medical aid.

4. 2. Most important Symptoms and Effects, both Acute and Delayed

Symptoms:

Contact with dust: causes irritation of eyes mucous membrane, coughing.

Effects:

4. 3. Indication of any Immediate Medical Attention and special Treatment needed

Treatment:

Symptomatic treatment (decontamination, vital functions), no specific antidote known.

5. Fire-Fighting Measures

5. 1. Extinguishing Media

Suitable extinguishing media:

Water mist, extinguishing powder, foam, carbon dioxide.

Unsuitable extinguishing media:

Water with full jet.

5. 2. Special Hazards arising from the Substance or Mixture

Special hazards:

The product is not flammable.
Dust can form explosive mixtures with air.
In case of fire: hazardous gases/vapors may be released.

5. 3. Advice for Firefighters

Protective equipment:

Wear self-contained respiratory protective device and full protective gear.

Further information:

6. Accidential Release Measures

6. 1. Personal Precautions, Protective Equipment and Emergency Procedures

Personal precautions:

Avoid contact with skin and eyes. Do not ingest or inhale.
Wear protective clothing.

6. 2. Environmental Precautions

Environmental precautions:

Prevent contamination of soils, drains and surface water.
Contact local authorities if product pollutes soil or vegetation.

6. 3. Methods and Material for Containment and Cleaning Up

Methods and material:

Sweep up, then place into a suitable container for disposal. Avoid generating dust.
Collect powder using a special dust vacuum cleaner with particle filter and dispose in a adequate resealable container.
Do not use compressed air.

6. 4. Reference to other Sections

Dispose of contaminated material according to Section 13.
Protective clothing, see Section 8.

7. Handling and Storage

7. 1. Precautions for Safe Handling

Instructions on safe handling:

Avoid contact with eyes and skin.
Do not swallow or inhale.
Avoid formation of dust.

Hygienic measures:

Wash hands at the end of work. Preventive skin protection recommended.

7. 2. Conditions for Safe Storage, including any Incompatibilities

Storage conditions:

Store in tightly sealed containers in a dry and cool room.

Requirements for storage areas and containers:

Information on fire and explosion protection:

Take measures to prevent electrostatic discharge.

Storage class:

10-13 (TRSG 510)

Further Information:

7. 3. Specific End Use(s)

Further information:

See Section 1.2.; no other uses provided

8. Exposure Controls/Personal Protection

8. 1. Parameters to be Controlled

Parameters to be controlled (DE):

TRGS 900
Polyvinyl alcohol (CAS 9002-89-5):
TLV: 1.25 mg/m3 air-borne fraction (general dust limit)
TLV: 10 mg/m3 inhalable fraction (general dust limit)
Peak limit category II (2)
Methanol (CAS 67-56-1): 130 mg/m3, 100 ppm; 2(II); Can be absorbed by the skin.
Methyl acetate (CAS 79-20-9): TLV: 620 mg/m3, 200 ppm (2(1))

Parameters to be controlled:

Methanol (CAS 67-56-1): IOEL TWA: 260 mg/m3, 200 ppm

Derived No-Effect Level (DNEL):

PNEC (Predicted No-Effect Concentration):

Additional Information:

Biological limit value (TRGS 903):
Methanol (BAT): 15 mg/l (urine)

8. 2. Exposure Controls

Technical protective measures:

Use local exhaust ventilation in case of dust and/or fume formation.
Provide adequate ventilation.

Personal Protection

General protective measures:

Keep away from foodstuffs and drinks. Do not eat, drink or smoke during work. Wash hands before breaks and at the end of work.

Respiratory protection:

Wear protective mask, particle filter P2 or FFP2 or NIOSH N95 (for solid and liquid particles, EN 143, 149) if dust occurs.

Hand protection:

Chemical protective gloves (EN 374 (Europe), F739 (US)).

Protective glove material:

Recommended: Protective index 6, corresponding > 480 min. of permeation time according to EN 374.
Nitrile rubber (NBR) (> 480 min, 0.12 mm)

Eye protection:

Safety glasses with protective shields (EN 166).

Body protection:

Protective clothing.

Environmental precautions:

Prevent from getting into the soil, surface water and sewage system.

9. Physical and Chemical Properties

9. 1. Information on Basic Physical and Chemical Properties

Form:	*liquid*
Color:	*milky*
Odor:	*odorless*
Odor threshold:	*no information available*
pH-Value:	*5 - 7*
Melting temperature:	
Boiling temperature:	*not applicable*
Flash point:	
Evaporation rate:	*not applicable*
Flammability (solid, gas):	*not available*
Upper explosion limit:	*not determined*
Lower explosion limit:	*not determined*
Vapor pressure:	*not applicable*
Vapor density:	

No information available.

Density:

Solubility in water: *dilutable*

Coefficient of variation (n-Octanol/Water):

no information available

Auto-ignition temperature:

not applicable

Decomposition temperature:

not determined

Viscosity, dynamic:

not determined

Explosive properties:

not applicable

Oxidizing properties:

no information available

Bulk density:

9. 2. Further Information

Solubility in solvents:

Viscosity, kinematic:

Burning class:

Solvent content:

Solid content:

Particle size:

Other information:

No further information.

10. Stability and Reactivity

10.1. Reactivity

Stable if used according to specifications.

10.2. Chemical Stability

Stable if used according to specifications.

10.3. Possibility of Hazardous Reactions

Hazardous polymerisation will not occur.

10.4. Conditions to Avoid

Conditions to avoid:

Avoid contact with heat, sparks and open fire.
Avoid dusting near sources of ignition.

Thermal decomposition:

10.5. Imcompatible Materials

Strong acids and strong oxidizing agents.

10.6. Hazardous Decomposition Products

Carbon oxides

10.7. Further Information

11. Toxicological Information

11. 1. Information on Hazard Classes as defined in Regulation (EC) No. 1272/2008

Acute Toxicity

LD50, oral:

Methanol: 1187-2769 mg/kg (rat); NOEC (Chronic): 466 - 529 (2 years, animal/m)
Methyl acetate: 6482 mg/kg (OECD 401)

LD50, dermal:

Methanol: 17100 mg/kg (rabbit)
Methyl acetate: > 2000 mg/kg (OECD 402)

LC50, inhalation:

Methanol: 128200 (4h, rat)

Primary effects

Irritant effect on skin:

Methanol: Not classified.

Irritant effect on eyes:

Methanol: Not classified.

Inhalation:

Ingestion:

Sensitization:

Methanol: Not classified.

Mutagenicity:

Methanol: Not classified.

Reproductive toxicity:

Methanol: Not classified.

Carcinogenicity:

Methanol: Not classified.

Teratogenicity:

No information available.

Specific target organ toxicity (STOT):

Single exposure:
Methanol: Damages the organs.
Methyl acetate: May cause drowsiness and dizziness.
Repeated exposure:
Methanol: Not classified.

Aspiration hazard:

No risk of aspiration.

11. 2. Information on other Hazards

No further information available.
Endocrine Disrupting Properties: no information available.

12. Ecological Information

12. 1. Aquatic Toxicity

The product is not considered to be harmful to aquatic organisms nor to cause long-term adverse effects in the environment.

Fish toxicity:

Methanol: LC50: 15400 mg/l (96h, Lepomis macrochirus); NOEC: 15800 mg/l (200h, Oryzias latipes)
Methyl acetate: LC50: 250 - 350 mg/l (Danio rerio)

Daphnia toxicity:

Methanol: EC50: > 10000 mg/l (48h, Daphnia magna); NOEC: 122 mg/l (Daphnia magna)
Methyl acetate: 1026.7 mg/l (Daphnia magna)

Bacteria toxicity:

no information available

Algae toxicity:

Methanol: EC50: 22000 mg/l (96h, Algae)
Methyl acetate: > 120 mg/l (Desmodesmus subspicatus)

12. 2. Persistency and Degradability

Polyvinyl alcohol: Expected to be inherently biodegradable.
Methanol: Easily biodegradable.
Methyl acetate: Easily biodegradable.

12. 3. Bioaccumulation

No bioaccumulation expected.
Methanol: Disbribution coefficient log POW: -0,77
Methyl acetate: Disbribution coefficient log POW: 0.18

12. 4. Mobility

No information available.

12. 5. Results of PBT- und vPvP Assessment

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB).

12. 6. Endocrine Disrupting Properties

This substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delgated Regulation (EU) No. 2017/2100 or Commission Regulaton (EU) 2018/605 at levels of 0.1 % or higher.

12. 7. Other Adverse Effects

Water hazard class:

1 (German Regulation) (Assessment by list): slightly hazardous.

Behaviour in sewage systems:

Further ecological effects:

AOX Value:

13. Disposal Considerations

13. 1. Waste Treatment Methods

Product:

Dispose of according to official national and local regulations.

European Waste Code (EWC):

Waste codes should be assigned by the user based on the application for which the product was used.

Uncleaned packaging:

Contaminated packaging must be disposed like the substance.

Waste Code No.:

14. Transport Information

14. 1. UN Number

ADR, IMDG, IATA

14. 2. UN Proper Shipping Name

ADR/RID:

No hazardous goods according to ADR / DOT (US) (land transportation).

IMDG/IATA:

Not hazardous goods

14. 3. Transport Hazard Classes

ADR Class:

not applicable

Hazard no.:

Classification code:

Tunnel restriction code:

IMDG Class (sea):

not applicable

Hazard no.:

EmS No.:

IATA Class:

not applicable

Hazard no.:

14. 4. Packaging Group

ADR/RID:

not applicable

IMDG:

IATA:

14. 5. Environmental Hazards

None

14. 6. Special Precautions for User

Not classified as a dangerous good under transport regulations.

14. 7. Maritime Transport in Bulk according to IMO Instruments

14. 8. Further Information

15. Regulatory Information

15. 1. Safety, Health and Environmental Regulations/Legislation specific for the Substance or Mixture

Water hazard class:

1, slightly hazardous for water (according to the German Regulation AwSV)

Local regulations on chemical accidents:

Employment restrictions:

The employment restrictions for expectant and nursing mothers in accordance with the Maternity Protection Guideline are to be observed.

The employment restrictions for young workers in accordance with the Youth Employment Protection Law (§ 22 JArbSchG) are to be observed.

Restriction and prohibition of application:

EC. REACH, Section XVII, Restrictions on the Manufacture, Placing on the Market and Use of Certain Dangerous Substances, Preparations and Articles: not applicable

Technical instructions on air quality:

15. 2. Chemical Safety Assessment

A Chemical Safety Assessment has not been carried out for this product.

15. 3. Further Information

Regulation (EU) 2019/1021 - Persistent organic pollutants: not regulated / not applicable

Regulation (EC) 1005/2009 - Substances that Deplete the Ozone Layer: not regulated / not applicable

Regulation (EC) 649/2012 concerning the export and import of dangerous chemicals: Not applicable

Regulation (EU) No. 2019/1148, Annex I - Restricted Explosives Precursors (upper limit value for the purpose of licensing under Article 5(3)): None of the ingredients is listed.

Regulation (EC) 273/2004, On Drug Precursors, Category 3: None of the ingredients is listed.

EC. REACH, Annex XIV, Candidate List of Substances of very High Concern (SVHC): not regulated / not applicable

16. Other Information

This product should be stored, handled and used in accordance with good hygiene practices and in conformity with any legal regulations. This information contained herein is based on the present state of knowledge and is intended to describe our product from the point of view of safety requirements. It should be therefore not be construed as guaranteeing specific properties.