

# **poly(vinyl alcohol) macromolecule 9002-89-5 MSDS**

## **Section 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE**

### **Product identifiers**

Product name : Poly(vinyl alcohol)

CAS-No. : 9002-89-5

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

Identified uses : Laboratory chemicals, Manufacture of substances

## **Section 2. HAZARDS IDENTIFICATION**

### **Classification of the substance or mixture**

Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008.

This substance is not classified as dangerous according to Directive 67/548/EEC.

### **Label elements**

The product does not need to be labelled in accordance with EC directives or respective national laws.

### **Other hazards - none**

## **Section 3. COMPOSITION/INFORMATION ON INGREDIENTS**

### **Substances**

## **Section 4. FIRST AID MEASURES**

### **Description of first aid measures**

#### **If inhaled**

If breathed in, move person into fresh air. If not breathing, give artificial respiration.

#### **In case of skin contact**

Wash off with soap and plenty of water.

#### **In case of eye contact**

Flush eyes with water as a precaution.

#### **If swallowed**

Never give anything by mouth to an unconscious person. Rinse mouth with water.

### **Most important symptoms and effects, both acute and delayed**

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

### **Indication of any immediate medical attention and special treatment needed**

no data available

## **Section 5. FIREFIGHTING MEASURES**

### **Extinguishing media**

#### **Suitable extinguishing media**

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

### **Special hazards arising from the substance or mixture**

Carbon oxides

**Advice for firefighters**

Wear self contained breathing apparatus for fire fighting if necessary.

**Further information**

Under fire conditions, material may decompose to form flammable and/or explosive mixtures in air.

**Section 6. ACCIDENTAL RELEASE MEASURES****Personal precautions, protective equipment and emergency procedures**

Avoid dust formation. Avoid breathing vapors, mist or gas.

**Environmental precautions**

Do not let product enter drains.

**Methods and materials for containment and cleaning up**

Sweep up and shovel. Keep in suitable, closed containers for disposal.

**Reference to other sections**

For disposal see section 13.

**Section 7. HANDLING AND STORAGE****Precautions for safe handling**

Provide appropriate exhaust ventilation at places where dust is formed. Normal measures for preventive fire protection.

**Conditions for safe storage, including any incompatibilities**

Store in cool place. Keep container tightly closed in a dry and well-ventilated place.

**Specific end uses**

no data available

**Section 8. EXPOSURE CONTROLS/PERSONAL PROTECTION****Control parameters****Components with workplace control parameters****Exposure controls****Appropriate engineering controls**

General industrial hygiene practice.

**Personal protective equipment****Eye/face protection**

Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

**Skin protection**

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

Immersion protection

Material: Nitrile rubber

Minimum layer thickness: 0,11 mm

Break through time: > 480 min

Material tested: Dermatril® ( Z677272, Size M)

Splash protection

Material: Nitrile rubber

Minimum layer thickness: 0,11 mm

Break through time: > 30 min

Material tested: Dermatril® ( Z677272, Size M)

data source: KCL GmbH, D-36124 Eichenzell, phone +49 (0)6659 873000, test method:

EN374

If used in solution, or mixed with other substances, and under conditions which differ from EN 374,

contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an Industrial Hygienist familiar with the specific situation of anticipated use by our

customers. It should not be construed as offering an approval for any specific use scenario.

#### **Body Protection**

Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place., The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

#### **Respiratory protection**

Respiratory protection is not required. Where protection from nuisance levels of dusts are desired, use type N95 (US) or type P1 (EN 143) dust masks. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

## **Section 9. PHYSICAL AND CHEMICAL PROPERTIES**

### **Information on basic physical and chemical properties**

- a) Appearance      Form: crystalline  
Colour: colourless
- b) Odour      no data available
- c) Odour Threshold      no data available
- d) pH      no data available
- e) Melting point/freezing      200 °C  
point
- f) Initial boiling point and no data available  
boiling range
- g) Flash point      > 113 °C - closed cup
- h) Evaporation rate      no data available
- i) Flammability (solid, gas) no data available
- j) Upper/lower      no data available  
flammability or  
explosive limits
- k) Vapour pressure      no data available

- l) Vapour density      no data available  
m) Relative density      1,269 g/cm<sup>3</sup>  
n) Water solubility      no data available  
o) Partition coefficient: n- no data available  
octanol/water  
p) Autoignition      no data available  
temperature  
q) Decomposition      no data available  
temperature  
r) Viscosity      no data available  
s) Explosive properties      no data available  
t) Oxidizing properties      no data available

**Other safety information**

no data available

**Section 10. STABILITY AND REACTIVITY**

**Reactivity**

no data available

**Chemical stability**

no data available

**Possibility of hazardous reactions**

no data available

**Conditions to avoid**

Exposure to light may affect product quality.

**Incompatible materials**

Strong oxidizing agents

**Hazardous decomposition products**

Other decomposition products - no data available

**Section 11. TOXICOLOGICAL INFORMATION**

**Information on toxicological effects**

**Acute toxicity**

LD50 Oral - rat - > 20.000 mg/kg

Remarks: Behavioral:Altered sleep time (including change in righting reflex).

Behavioral:Somnolence

(general depressed activity). Behavioral:Muscle weakness.

**Skin corrosion/irritation**

no data available

**Serious eye damage/eye irritation**

no data available

**Respiratory or skin sensitization**

no data available

**Germ cell mutagenicity**

no data available

**Carcinogenicity**

IARC: 3 - Group 3: Not classifiable as to its carcinogenicity to humans (Ethenol, homopolymer)

**Reproductive toxicity**

no data available

**Specific target organ toxicity - single exposure**

no data available

**Specific target organ toxicity - repeated exposure**

no data available

**Aspiration hazard**

no data available

**Potential health effects**

**Inhalation** May be harmful if inhaled. May cause respiratory tract irritation.

**Ingestion** May be harmful if swallowed.

**Skin** May be harmful if absorbed through skin. May cause skin irritation.

**Eyes** May cause eye irritation.

**Signs and Symptoms of Exposure**

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

**Additional Information**

RTECS: TR8100000

**Section 12. ECOLOGICAL INFORMATION****Toxicity**

no data available

**Persistence and degradability**

no data available

**Bioaccumulative potential**

no data available

**Mobility in soil**

no data available

**Results of PBT and vPvB assessment**

no data available

**Other adverse effects**

no data available

**Section 13. DISPOSAL CONSIDERATIONS****Waste treatment methods****Product**

Offer surplus and non-recyclable solutions to a licensed disposal company.

**Contaminated packaging**

Dispose of as unused product.

## Section 14. TRANSPORT INFORMATION

### UN number

ADR/RID: -      IMDG: -      IATA: -

### UN proper shipping name

ADR/RID: Not dangerous goods

IMDG: Not dangerous goods

IATA:      Not dangerous goods

### Transport hazard class(es)

ADR/RID: -      IMDG: -      IATA: -

### Packaging group

ADR/RID: -      IMDG: -      IATA: -

### Environmental hazards

ADR/RID: no      IMDG Marine pollutant: no      IATA: no

### Special precautions for user

no data available

## Section 15. REGULATORY INFORMATION

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

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

no data available

### Chemical Safety Assessment

no data available

## Section 16. OTHER INFORMATION

### Further information

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The above information is believed to be correct but does not purport to be all inclusive and shall be

used only as a guide. The information in this document is based on the present state of our knowledge

and is applicable to the product with regard to appropriate safety precautions. It does not represent any

guarantee of the properties of the product. Corporation and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See

and/or the reverse side of invoice or packing slip for additional terms and conditions of sale.