

**SAFETY DATA SHEET**

according to the Global Harmonized System (and with all of the information required by the HPR)

Revision Date 06/14/2018

Version 1.5

**SECTION 1. Identification****Product identifier**

Product number	114266
Product name	Polyvinyl alcohol protective colloid for argentometric titration
Synonyms	PVA, PVOH
CAS-No.	9002-89-5

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

Identified uses	Reagent for research and development
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**Details of the supplier of the safety data sheet**

Company	Millipore (Canada) Ltd   109 Woodbine Downs Blvd. Unit 5   Etobicoke   Ontario M9W 6Y1   Canada   General Inquiries: +1 800-645-5476   Monday to Friday, 9:00 AM to 4:00 PM Eastern Time (GMT-5) MilliporeSigma is a business of Merck KGaA, Darmstadt, Germany.
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Emergency telephone	800-424-9300 CHEMTREC (USA) +1-703-527-3887 CHEMTREC (International) 24 Hours/day; 7 Days/week
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**SECTION 2. Hazards identification****GHS-Labeling**

Not a dangerous substance according to GHS.

**Other hazards**

None known.

**SECTION 3. Composition/information on ingredients**

Chemical nature	Polymer with Methanol (as impurity) Volatile.
Formula	$(C_2H_4O)_n$ (Hill)
Synonyms	PVA, PVOH

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Remarks

WHMIS hazardous composition: No ingredients are hazardous according to the CPR criteria.

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## SECTION 4. First aid measures

### Description of first-aid measures

#### *Inhalation*

After inhalation: fresh air.

#### *Skin contact*

In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/shower.

#### *Eye contact*

After eye contact: rinse out with plenty of water. Remove contact lenses.

#### *Ingestion*

After swallowing: make victim drink water (two glasses at most). Consult doctor if feeling unwell.

Never give anything by mouth to an unconscious person.

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

We have no description of any toxic symptoms.

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

No information available.

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## SECTION 5. Fire-fighting measures

### Extinguishing media

#### *Suitable extinguishing media*

Water, Foam, Carbon dioxide (CO<sub>2</sub>), Dry powder

#### *Unsuitable extinguishing media*

For this substance/mixture no limitations of extinguishing agents are given.

### Special hazards arising from the substance or mixture

Combustible.

Risk of dust explosion.

Development of hazardous combustion gases or vapors possible in the event of fire.

### Advice for firefighters

#### *Special protective equipment for fire-fighters*

In the event of fire, wear self-contained breathing apparatus.

#### *Further information*

Suppress (knock down) gases/vapors/mists with a water spray jet.

Prevent fire extinguishing water from contaminating surface water or the ground water system.

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## SECTION 6. Accidental release measures

### Personal precautions, protective equipment and emergency procedures

Advice for non-emergency personnel: Avoid inhalation of dusts. Evacuate the danger area, observe emergency procedures, consult an expert.

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Advice for emergency responders:

Protective equipment see section 8.

### **Environmental precautions**

Do not let product enter drains.

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

Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). Take up dry. Dispose of properly. Clean up affected area. Avoid generation of dusts.

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## **SECTION 7. Handling and storage**

### **Precautions for safe handling**

Observe label precautions.

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

Tightly closed. Dry.

Store below +30°C (+86°F).

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## SECTION 8. Exposure controls/personal protection

### Exposure limit(s)

#### Ingredients

Basis	Value	Threshold limits	Remarks
<i>methanol 67-56-1</i>			
CAD AB OEL	Time Weighted Average (TWA):	200 ppm 262 mg/m <sup>3</sup>	
	Short Term Exposure Limit (STEL):	250 ppm 328 mg/m <sup>3</sup>	
	Skin designation:		Can be absorbed through the skin.
CAD BC OEL	Short Term Exposure Limit (STEL):	250 ppm	
	Skin designation:		Can be absorbed through the skin.
	Time Weighted Average (TWA):	200 ppm	
CAD MB OEL	Time Weighted Average (TWA):	200 ppm	
	Short Term Exposure Limit (STEL):	250 ppm	
	Skin designation:		Can be absorbed through the skin.
CAD ON OEL	Time Weighted Average (TWA):	200 ppm	
	Short Term Exposure Limit (STEL):	250 ppm	
	Skin designation:		Can be absorbed through the skin.
OEL (QUE)	Time Weighted Average (TWA):	200 ppm 262 mg/m <sup>3</sup>	
	Short Term Exposure Limit (STEL):	250 ppm 328 mg/m <sup>3</sup>	
	Skin designation:		Can be absorbed through the skin.

### Engineering measures

Technical measures and appropriate working operations should be given priority over the use of personal protective equipment.

### Individual protection measures

Protective clothing should be selected specifically for the workplace, depending on concentration and quantity of the hazardous substances handled. The chemical resistance of the protective equipment should be inquired at the respective supplier.

### Hygiene measures

Change contaminated clothing. Wash hands after working with substance.

### Eye/face protection

Safety glasses

### Hand protection

Chemical-resistant, impervious gloves complying with an approved standard should be

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worn at all times when handling chemical products if a risk assessment indicates this is necessary.

## *Other protective equipment:*

protective clothing

## *Respiratory protection*

required when dusts are generated.

Recommended Filter type: Filter P 1 (acc. to DIN 3181) for solid particles of inert substances

The entrepreneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are performed according to the instructions of the producer. These measures have to be properly documented.

## SECTION 9. Physical and chemical properties

Physical state	No information available.
Color	white
Odor	odorless
Odor Threshold	Not applicable
pH	No information available.
Melting point/range	320 - 464 °F (160 - 240 °C)
Boiling point	No information available.
Flash point	No information available.
Evaporation rate	No information available.
Flammability (solid, gas)	No information available.
Lower explosion limit	No information available.
Upper explosion limit	No information available.
Vapor pressure	No information available.
Relative vapor density	No information available.
Density	No information available.
Relative density	No information available.
Water solubility	soluble in hot water

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	at 68 °F (20 °C) insoluble
Partition coefficient: n-octanol/water	No information available.
Autoignition temperature	No information available.
Decomposition temperature	> 392 °F (> 200 °C)
Viscosity, dynamic	No information available.
Explosive properties	Not classified as explosive.
Oxidizing properties	none
Bulk density	400 - 670 kg/m <sup>3</sup>

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### SECTION 10. Stability and reactivity

#### Reactivity

Risk of dust explosion.

#### Chemical stability

The product is chemically stable under standard ambient conditions (room temperature) .

#### Possibility of hazardous reactions

Violent reactions possible with:

Strong oxidizing agents

#### Conditions to avoid

Strong heating (decomposition).

#### Incompatible materials

no information available

#### Hazardous decomposition products

no information available

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### SECTION 11. Toxicological information

#### Information on toxicological effects

*Likely route of exposure*

Eye contact, Skin contact, Ingestion

*Acute oral toxicity*

LD<sub>50</sub> Rat: > 2,000 mg/kg

OECD Test Guideline 401

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### *Acute inhalation toxicity*

Acute toxicity estimate: > 20 mg/l; 4 h ; vapor

Calculation method

### *Acute dermal toxicity*

Acute toxicity estimate : > 2,000 mg/kg

Calculation method

### *Skin irritation*

Rabbit

Result: No irritation

(External MSDS)

### *Eye irritation*

Rabbit

Result: No eye irritation

(External MSDS)

### *Genotoxicity in vitro*

Ames test

Result: negative

(Lit.)

### *Specific target organ systemic toxicity - single exposure*

The substance or mixture is not classified as specific target organ toxicant, single exposure.

### *Specific target organ systemic toxicity - repeated exposure*

The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

### *Aspiration hazard*

Regarding the available data the classification criteria are not fulfilled.

## **Carcinogenicity**

IARC

No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

OSHA

No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens.

NTP

No ingredient of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

ACGIH

No ingredient of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

## **Further information**

Hazardous properties cannot be excluded but are unlikely when the product is handled appropriately.

Handle in accordance with good industrial hygiene and safety practice.

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### SECTION 12. Ecological information

#### Ecotoxicity

##### *Toxicity to fish*

LC50 Danio rerio (zebra fish): > 5,000 mg/l; 96 h

OECD Test Guideline 203

##### *Toxicity to daphnia and other aquatic invertebrates*

EC50 Daphnia: 8.3 mg/l; 48 h (External MSDS)

##### *Toxicity to bacteria*

EC0 Bacteria: > 8,000 mg/l; 10 d (Lit.)

#### Persistence and degradability

##### *Biodegradability*

> 90 %

OECD Test Guideline 302B

Readily eliminated from water

#### Bioaccumulative potential

No information available.

#### Mobility in soil

No information available.

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### SECTION 13. Disposal considerations

The information presented only applies to the material as supplied. The identification based on characteristic(s) or listing may not apply if the material has been used or otherwise contaminated. It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste identification and disposal methods in compliance with applicable regulations. Disposal should be in accordance with applicable regional, national and local laws and regulations.

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### SECTION 14. Transport information

#### Land transport (DOT)

Not classified as dangerous in the meaning of transport regulations.

#### Air transport (IATA)

Not classified as dangerous in the meaning of transport regulations.

#### Sea transport (IMDG)

Not classified as dangerous in the meaning of transport regulations.

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### SECTION 15. Regulatory information

#### United States of America

#### Canada

This product has been classified in accordance with the hazard criteria of the Hazardous Products Regulations (HPR) and the SDS contains all the information required by the HPR.

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### Notification status

TSCA: All components of the product are listed in the TSCA-inventory.

DSL: All components of this product are on the Canadian DSL

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## SECTION 16. Other information

### Training advice

Provide adequate information, instruction and training for operators.

### Key or legend to abbreviations and acronyms used in the safety data sheet

Used abbreviations and acronyms can be looked up at [www.wikipedia.org](http://www.wikipedia.org).

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The information contained herein is based on the present state of our knowledge. It characterizes the product with regard to appropriate safety precautions. It does not represent a warranty of any product properties and we assume no liability for any loss or injury which may result from the use of this information. Users should conduct their own investigations to determine the suitability of the information.

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