

SAFETY DATA SHEET

Creation Date 01-Jun-2010 Revision Date 18-Jan-2018 Revision Number 3

1. Identification

Product Name Polyvinylpyrrolidone

Cat No.: BP431-100; BP431-500

CAS-No 9003-39-8 Synonyms Povidone; PVP

Recommended Use Laboratory chemicals.

Uses advised against Not for food, drug, pesticide or biocidal product use

Details of the supplier of the safety data sheet

Company

Fisher Scientific One Reagent Lane Fair Lawn, NJ 07410 Tel: (201) 796-7100

Emergency Telephone Number

CHEMTREC®, Inside the USA: 800-424-9300 CHEMTREC®, Outside the USA: 001-703-527-3887

2. Hazard(s) identification

Classification

This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Based on available data, the classification criteria are not met

Label Elements

None required

Hazards not otherwise classified (HNOC)

None identified

3. Composition/Information on Ingredients

| Component | CAS-No | Weight % |
|-----------------------|-----------|----------|
| Polyvinyl pyrrolidone | 9003-39-8 | 100 |

4. First-aid measures

Eye Contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get

medical attention.

Skin Contact Wash off immediately with plenty of water for at least 15 minutes. Get medical attention

immediately if symptoms occur.

Inhalation Move to fresh air. Get medical attention immediately if symptoms occur. If not breathing,

give artificial respiration.

Ingestion Do not induce vomiting. Obtain medical attention.

Most important symptoms and

effects

No information available.

Notes to Physician

Treat symptomatically

5. Fire-fighting measures

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

Unsuitable Extinguishing Media No information available

Flash Point No information available Method - No information available

Autoignition Temperature

Explosion Limits

Upper No data available
Lower No data available
Sensitivity to Mechanical Impact No information available
Sensitivity to Static Discharge No information available

Specific Hazards Arising from the Chemical

Keep product and empty container away from heat and sources of ignition.

Hazardous Combustion Products

Carbon monoxide (CO) Carbon dioxide (CO₂) Nitrogen oxides (NOx) Thermal decomposition can lead to release of irritating gases and vapors

Protective Equipment and Precautions for Firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. Thermal decomposition can lead to release of irritating gases and vapors.

NFPA

| Health | Flammability | Instability | Physical hazards |
|--------|--------------|-------------|------------------|
| 1 | 1 | 0 | N/A |

6. Accidental release measures

Personal Precautions
Environmental Precautions

Ensure adequate ventilation. Use personal protective equipment. Avoid dust formation. Should not be released into the environment. See Section 12 for additional ecological information.

Methods for Containment and Clean Sweep up or vacuum up spillage and collect in suitable container for disposal. Avoid dust **Up** formation.

| | 7. Handling and storage |
|----------|---|
| Handling | Wear personal protective equipment. Ensure adequate ventilation. Avoid contact with skin, |

eyes and clothing. Avoid ingestion and inhalation. Avoid dust formation. Wash hands before breaks and immediately after handling the product.

Storage Keep containers tightly closed in a dry, cool and well-ventilated place.

8. Exposure controls / personal protection

Exposure Guidelines This product does not contain any hazardous materials with occupational exposure

limitsestablished by the region specific regulatory bodies.

Engineering Measures None under normal use conditions.

Personal Protective Equipment

Eye/face ProtectionWear appropriate protective eyeglasses or chemical safety goggles as described by

OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard

EN166.

Skin and body protectionWear appropriate protective gloves and clothing to prevent skin exposure.

Respiratory Protection No protective equipment is needed under normal use conditions.

Hygiene Measures Handle in accordance with good industrial hygiene and safety practice.

9. Physical and chemical properties

Physical State Solid

Appearance White - Off-white

OdorNo information availableOdor ThresholdNo information availablepH3 - 7 5% aq.solution

Melting Point/Range100 °C / 212 °FBoiling Point/RangeNo information availableFlash PointNo information available

Evaporation Rate Not applicable

Flammability (solid,gas) No information available

Flammability or explosive limits

Upper No data available
Lower No data available
No data available
No data available
negligible
Vapor Density Not applicable
Specific Gravity 1.1 - 1.3
Solubility Soluble in water
Partition coefficient: n-octanol/water No data available

Autoignition Temperature

Decomposition TemperatureNo information available

Viscosity Not applicable

10. Stability and reactivity

Reactive Hazard None known, based on information available

Stability Stable under normal conditions.

Conditions to Avoid Incompatible products. Excess heat. Avoid dust formation.

Incompatible Materials Strong oxidizing agents

Hazardous Decomposition Products Carbon monoxide (CO), Carbon dioxide (CO2), Nitrogen oxides (NOx), Thermal

decomposition can lead to release of irritating gases and vapors

Hazardous Polymerization Hazardous polymerization does not occur.

Hazardous Reactions None under normal processing.

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11. Toxicological information

Acute Toxicity

Product Information

Based on ATE data, the classification criteria are not met. ATE > 2000 mg/kg. Oral LD50 Based on ATE data, the classification criteria are not met. ATE > 2000 mg/kg. **Dermal LD50** Based on ATE data, the classification criteria are not met. ATE > 5 mg/l. Mist LC50

Component Information

| Component | LD50 Oral | LD50 Dermal | LC50 Inhalation |
|-----------------------|-----------------------|-------------|-----------------|
| Polyvinyl pyrrolidone | LD50 = 100 g/kg (Rat) | Not listed | Not listed |

Toxicologically Synergistic

Products

No information available

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Irritation May cause eye, skin, and respiratory tract irritation

Sensitization No information available

Carcinogenicity The table below indicates whether each agency has listed any ingredient as a carcinogen.

| Component | | | NTP | ACGIH | OSHA | Mexico | | |
|-----------------------|-----------|------------|------------|------------|------------|------------|--|--|
| Polyvinyl pyrrolidone | 9003-39-8 | Not listed | | |

Mutagenic Effects No information available

No information available. **Reproductive Effects**

Developmental Effects No information available.

No information available. **Teratogenicity**

None known STOT - single exposure STOT - repeated exposure None known

Aspiration hazard No information available

Symptoms / effects,both acute and No information available

delayed

Endocrine Disruptor Information No information available

Other Adverse Effects The toxicological properties have not been fully investigated.

12. Ecological information

Ecotoxicity

| Component | Freshwater Algae | Freshwater Fish | Microtox | Water Flea |
|-----------------------|-----------------------|------------------------|------------|------------|
| Polyvinyl pyrrolidone | EC50: >1000 mg/L/72 H | LC50 : >1000 mg/L/96 H | Not listed | Not listed |
| | (Marine Algae) | (Juvenile Turbot) | | |

Persistence and Degradability Soluble in water Persistence is unlikely based on information available.

Bioaccumulation/ Accumulation No information available.

Will likely be mobile in the environment due to its water solubility. **Mobility**

| 13. Disposal considerations | | | | | | | | | | | | | | | | |
|-----------------------------|---|--|---|--|--|--|--|--|--|---|--|--|--|---|--|--|
| | • | | • | | | | | | | - | | | | - | | |

Chemical waste generators must determine whether a discarded chemical is classified as a **Waste Disposal Methods** hazardous waste. Chemical waste generators must also consult local, regional, and

national hazardous waste regulations to ensure complete and accurate classification.

| | 14. Transport information | | | | | | | | |
|----------------------------|---------------------------|--|--|--|--|--|--|--|--|
| DOT | Not regulated | | | | | | | | |
| DOT TDG IATA | Not regulated | | | | | | | | |
| <u>IATA</u> | Not regulated | | | | | | | | |
| IMDG/IMO | Not regulated | | | | | | | | |
| 15. Regulatory information | | | | | | | | | |

International Inventories

| Component | TSCA | DSL | NDSL | EINECS | ELINCS | NLP | PICCS | ENCS | AICS | IECSC | KECL |
|-----------------------|------|-----|------|--------|--------|-----|-------|------|------|-------|------|
| Polyvinyl pyrrolidone | Х | Х | - | - | - | | Х | Χ | Χ | Х | Χ |

Legend:

X - Listed

- E Indicates a substance that is the subject of a Section 5(e) Consent order under TSCA.
- F Indicates a substance that is the subject of a Section 5(f) Rule under TSCA.
- N Indicates a polymeric substance containing no free-radical initiator in its inventory name but is considered to cover the designated polymer made with any free-radical initiator regardless of the amount used.
- P Indicates a commenced PMN substance
- R Indicates a substance that is the subject of a Section 6 risk management rule under TSCA.
- S Indicates a substance that is identified in a proposed or final Significant New Use Rule
- T Indicates a substance that is the subject of a Section 4 test rule under TSCA.
- XU Indicates a substance exempt from reporting under the Inventory Update Rule, i.e. Partial Updating of the TSCA Inventory Data Base Production and Site Reports (40 CFR 710(B).
- Y1 Indicates an exempt polymer that has a number-average molecular weight of 1,000 or greater.
- Y2 Indicates an exempt polymer that is a polyester and is made only from reactants included in a specified list of low concern reactants that comprises one of the eligibility criteria for the exemption rule.

U.S. Federal Regulations

TSCA 12(b) Not applicable

SARA 313 Not applicable

SARA 311/312 Hazard Categories See section 2 for more information

CWA (Clean Water Act) Not applicable

Clean Air Act Not applicable

OSHA Occupational Safety and Health Administration

Not applicable

CERCLA Not applicable

California Proposition 65 This product does not contain any Proposition 65 chemicals

U.S. State Right-to-Know Not applicable

Regulations

U.S. Department of Transportation

Reportable Quantity (RQ): N
DOT Marine Pollutant N
DOT Severe Marine Pollutant N

U.S. Department of Homeland Security

This product does not contain any DHS chemicals.

Other International Regulations

Mexico - Grade No information available

16. Other information

Prepared By Regulatory Affairs

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Revision Summary This document has been updated to comply with the US OSHA HazCom 2012 Standard

replacing the current legislation under 29 CFR 1910.1200 to align with the Globally

Harmonized System of Classification and Labeling of Chemicals (GHS).

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text

End of SDS