# Material Safety Data Sheet

## Section 1. Chemical Product and Company Identification

<table>
<thead>
<tr>
<th>Common Name/Trade Name</th>
<th>Catalog Number(s)</th>
<th>CAS#</th>
</tr>
</thead>
<tbody>
<tr>
<td>Polyvinylpyrrolidone K-30</td>
<td>P1216, P1454, PO147, YY1100</td>
<td>9003-39-8</td>
</tr>
</tbody>
</table>

### Manufacturer
SPECTRUM LABORATORY PRODUCTS INC.  
14422 S. SAN PEDRO STREET  
GARDENA, CA 90248

### Commercial Name(s)
Plasdone K-30, Agrimer, Albiguen A, Hemodesis K90, Luviskol K90, Plasdone, Povidone, PVPP, PVP-K 90

### Synonym
PVP; Polyvinylpyrrolidone; Poly[1-(2-oxo-1-pyrrolidinyl)ethylene]; Povidone K-30; 1-Ethenyl-2-pyrrolidinone polymers; 2-Pyrrolidinone, 1-ethenyl, homopolymer; 2-Pyrrolidinone, 1-vinyl-, polymers; N-Vinylpyrrolidinone polymer; N-Vinylbutyrolactam polymer; N-Vinylpyrrolidinone polymer; Poly(n-vinylbutyrolactam); Poly(1-vinylpyrrolidinone); Poly(Nvinylpyrrolidinone); Vinylpyrrolidinone polymer; Vinylpyrrolidone polymer

### Chemical Name
Poly(1-vinyl-2-pyrrolidinone)

### Chemical Family
Not available.

### Chemical Formula
\((\text{C}_6\text{H}_9\text{N}_\text{O})_n\)

### Supplier
SPECTRUM LABORATORY PRODUCTS INC.  
14422 S. SAN PEDRO STREET  
GARDENA, CA 90248

### IN CASE OF EMERGENCY
CHEMTREC (24hr) 800-424-9300

## Section 2. Composition and Information on Ingredients

### Exposure Limits

<table>
<thead>
<tr>
<th>Name</th>
<th>CAS #</th>
<th>TWA (mg/m³)</th>
<th>STEL (mg/m³)</th>
<th>CEIL (mg/m³)</th>
<th>% by Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) Polyvinylpyrrolidone K-30</td>
<td>9003-39-8</td>
<td></td>
<td></td>
<td>100</td>
<td></td>
</tr>
</tbody>
</table>

### Toxicological Data on Ingredients
Not applicable.
Section 3. Hazards Identification

Potential Acute Health Effects
Slightly hazardous in case of skin contact (irritant), of eye contact (irritant), of ingestion, of inhalation.

Potential Chronic Health Effects
CARCINOGENIC EFFECTS: 3 (Not classifiable for human.) by IARC.
MUTAGENIC EFFECTS: Not available.
TERATOGENIC EFFECTS: Not available.
DEVELOPMENTAL TOXICITY: Not available.
Repeated or prolonged exposure is not known to aggravate medical condition.

Section 4. First Aid Measures

Eye Contact
Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Cold water may be used. Get medical attention if irritation occurs.

Skin Contact
Wash with soap and water. Cover the irritated skin with an emollient. Get medical attention if irritation develops. Cold water may be used.

Serious Skin Contact
Not available.

Inhalation
If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

Serious Inhalation
Not available.

Ingestion
Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention if symptoms appear.

Serious Ingestion
Not available.

Section 5. Fire and Explosion Data

Flammability of the Product
May be combustible at high temperature.

Auto-Ignition Temperature
Not available.

Flash Points
Not available.

Flammable Limits
Not available.

Products of Combustion
These products are carbon oxides (CO, CO2), nitrogen oxides (NO, NO2...).

Fire Hazards in Presence of Various Substances
Slightly flammable to flammable in presence of heat. Non-flammable in presence of shocks.

Explosion Hazards in Presence of Various Substances
Slightly explosive in presence of open flames and sparks. Non-explosive in presence of shocks.

Fire Fighting Media and Instructions
SMALL FIRE: Use DRY chemical powder.
LARGE FIRE: Use water spray, fog or foam. Do not use water jet.

Special Remarks on Fire Hazards
As with most organic solids, fire is possible at elevated temperatures.

Special Remarks on Explosion Hazards
Fine dust dispersed in air in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard.

Continued on Next Page
Section 6. Accidental Release Measures

Small Spill
Use appropriate tools to put the spilled solid in a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and dispose of according to local and regional authority requirements.

Large Spill
Use a shovel to put the material into a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and allow to evacuate through the sanitary system.

Section 7. Handling and Storage

Precautions
Keep away from heat. Keep away from sources of ignition. Do not ingest. Do not breathe dust. If ingested, seek medical advice immediately and show the container or the label. Keep away from incompatibles such as oxidizing agents.

Storage
Keep container tightly closed. Keep container in a cool, well-ventilated area. Hygroscopic.

Section 8. Exposure Controls / Personal Protection

Engineering Controls
Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

Personal Protection
Safety glasses. Lab coat. Dust respirator. Be sure to use an approved/certified respirator or equivalent. Gloves.

Personal Protection in Case of a Large Spill
Splash goggles. Full suit. Dust respirator. Boots. Gloves. A self contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

Exposure Limits
Not available.

Section 9. Physical and Chemical Properties

Physical state and appearance
Solid. (Powdered solid.)

Molecular Weight
(111.14) g/mole

pH (1% soln/water)
Not available.

Boiling Point
90°C (194°F)

Melting Point
13.9°C (57°F)

Critical Temperature
Not available.

Specific Gravity
Density: 1.23 (Water = 1)

Vapor Pressure
Not applicable.

Vapor Density
Not available.

Volatility
Not available.

Odor Threshold
Not available.

Water/Oil Dist. Coeff.
Not available.

Ionicity (in Water)
Not available.

Dispersion Properties
See solubility in water.

Solubility
Soluble in cold water.
Soluble in water giving a colloidal solution.
Soluble in chloroform, alcohol, chlorinated hydrocarbons, amines, nitro paraffins, lower weight fatty acids.
### Section 10. Stability and Reactivity Data

<table>
<thead>
<tr>
<th>Product</th>
<th>Stability</th>
<th>Instability Temperature</th>
<th>Conditions of Instability</th>
<th>Incompatibility with various substances</th>
<th>Corrosivity</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>The product is stable.</td>
<td>Not available.</td>
<td>Excess heat, incompatible materials</td>
<td>Reactive with oxidizing agents</td>
<td>Not available.</td>
</tr>
</tbody>
</table>

**Special Remarks on Reactivity**
- Hygroscopic; keep container tightly closed.

**Special Remarks on Corrosivity**
- Not available.

**Polymerization**
- Will not occur.

### Section 11. Toxicological Information

<table>
<thead>
<tr>
<th>Routes of Entry</th>
<th>Inhalation. Ingestion.</th>
</tr>
</thead>
</table>

**Toxicity to Animals**
- Acute oral toxicity (LD50): 40000 mg/kg [Mouse].
- Acute oral toxicity (LD50): 100000 mg/kg [Rat].
- Acute oral toxicity (LD50): 100000 mg/kg [Guinea Pig].

**Chronic Effects on Humans**
- CARCINOGENIC EFFECTS: 3 (Not classifiable for human.) by IARC.

**Other Toxic Effects on Humans**
- Slightly hazardous in case of skin contact (irritant), of ingestion, of inhalation.

**Special Remarks on Toxicity to Animals**
- Not available.

**Special Remarks on Chronic Effects on Humans**
- Not available.

**Special Remarks on other Toxic Effects on Humans**
- Acute Potential Health Effects:
  - Skin: It is not considered a primary irritant. However, it may cause skin irritation.
  - Eyes: May cause eye irritation.
  - Inhalation: Breathing dust may cause respiratory tract irritation. Symptoms may include coughing, sore throat, labored breathing, and chest pain.
  - Ingestion: May cause gastrointestinal tract irritation with nausea, vomiting, purging effect, hypermotility, and diarrhea.
  - Chronic Potential Health Effects
    - Ingestion: Prolonged or repeated ingestion may affect the urinary system, and spleen.

### Section 12. Ecological Information

<table>
<thead>
<tr>
<th>Ecotoxicity</th>
<th>Not available.</th>
</tr>
</thead>
</table>

**BOD5 and COD**
- Not available.

**Products of Biodegradation**
- Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.

**Toxicity of the Products of Biodegradation**
- The product itself and its products of degradation are not toxic.

**Special Remarks on the Products of Biodegradation**
- Not available.
Section 13. Disposal Considerations

Waste Disposal
Waste must be disposed of in accordance with federal, state and local environmental control regulations.

Section 14. Transport Information

DOT Classification
Not a DOT controlled material (United States).

Identification
Not applicable.

Special Provisions for Transport
Not applicable.

DOT (Pictograms)

Section 15. Other Regulatory Information and Pictograms

Federal and State Regulations
California Director's List of Hazardous Substances: Polyvinylpyrrolidone K-30
TSCA 8(b) inventory: Polyvinylpyrrolidone K-30

California Proposition 65
California prop. 65: This product contains the following ingredients for which the State of California has found to cause cancer which would require a warning under the statute: No products were found.
California prop. 65: This product contains the following ingredients for which the State of California has found to cause birth defects which would require a warning under the statute: No products were found.

Other Regulations
EINECS: This product is not on the European Inventory of Existing Commercial Chemical Substances.
Canada: Listed on Canadian Domestic Substance List (DSL).
China: Listed on National Inventory.
Japan: Listed on National Inventory (ENCS).
Korea: Listed on National Inventory (KECI).
Philippines: Listed on National Inventory (PICCS).
Australia: Listed on AICS.

Other Classifications
WHMIS (Canada) Not controlled under WHMIS (Canada).
DSCL (EEC) This product is not classified according to the EU regulations.

HIMS (U.S.A.)

<table>
<thead>
<tr>
<th>Hazard</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health Hazard</td>
<td>1</td>
</tr>
<tr>
<td>Fire Hazard</td>
<td>1</td>
</tr>
<tr>
<td>Reactivity</td>
<td>0</td>
</tr>
</tbody>
</table>

National Fire Protection Association (U.S.A.)

<table>
<thead>
<tr>
<th>Hazard</th>
<th>Value</th>
</tr>
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<tbody>
<tr>
<td>Health</td>
<td>1</td>
</tr>
<tr>
<td>Reactivity</td>
<td>0</td>
</tr>
</tbody>
</table>

HIMS (Canada) (Pictograms)

DSCL (Europe) (Pictograms)

Continued on Next Page
Polyvinylpyrrolidone K-30

Section 16. Other Information

<table>
<thead>
<tr>
<th>MSDS Code</th>
<th>P3997</th>
</tr>
</thead>
<tbody>
<tr>
<td>References</td>
<td>Not available.</td>
</tr>
<tr>
<td>Other Special Considerations</td>
<td>Major Uses: Clarifying agent in wine, beer, fruit juice; dispersing and suspending agent in pharmaceuticals; in cast films adherent to glass, metals, plastics; in detergents; in adhesives; as a thickener for printing inks and latex paints; in detoxification of chemicals such as iodine, phenol, and poisonous drugs; topical antimicrobial</td>
</tr>
</tbody>
</table>

Verified by Sonia Owen.  

CALL (310) 516-8000

Notice to Reader

All chemicals may pose unknown hazards and should be used with caution. This Material Safety Data Sheet (MSDS) applies only to the material as packaged. If this product is combined with other materials, deteriorates, or becomes contaminated, it may pose hazards not mentioned in this MSDS. It shall be the user’s responsibility to develop proper methods of handling and personal protection based on the actual conditions of use. While this MSDS is based on technical data judged to be reliable, Spectrum Quality Products, Inc. assumes no responsibility for the completeness or accuracy of the information contained herein.