MATERIAL SAFETY DATA SHEET

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product code: P1800
Product Name: Polyvinyl Acetate (A.W. Approx. 100, 000)
Chemical Name: Acetic acid, vinyl ester, polymer
Synonyms: Acetic acid ethenyl ester homopolymer
Recommended use: Adhesives. Paints.
CAS #: 9003-20-7
Formula: [-CH2-CH(O2CCH3)-]n
RTECS #: AK0920000
CI#: Not available
Supplier: Spectrum Chemicals and Laboratory Products, Inc.
14422 South San Pedro St.
Gardena, CA  90248
(310) 516-8000
Emergency Telephone Number: CHEMTREC: 1-800-424-9300
Contact Person: Martin LaBenz (West Coast)
Contact Person: Chris Terpak (East Coast)

2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW
May cause skin and eye irritation. May cause irritation of respiratory tract.

Odor: None.
Physical state: Solid.
Appearance: Beads. Pellets.
Color: Colorless. Translucent.

OSHA Regulatory Status
This material is not considered hazardous by the OSHA Hazard Communication Standard (29 1910.1200)
2. HAZARDS IDENTIFICATION

POTENTIAL HEALTH EFFECTS

Principal Routes of Exposure:
None.

Acute Potential Health Effects:

Skin Contact:
May cause skin irritation.

Eye Contact:
Contact with eyes may cause irritation.

Inhalation:
None.

Ingestion:
May cause digestive (gastrointestinal) tract irritation.

Chronic Potential Health Effects:

Carcinogen Status:  IARC Group 3 (not classifiable as to carcinogenicity to humans)

Target Organs: No information available

Teratogenic Effects: No information available

Mutagenic Effects: No information available

Aggravated Medical Conditions: No information available

See Section 11 for additional Toxicological Information

POTENTIAL ENVIRONMENTAL EFFECTS

No information available

3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Components</th>
<th>CAS-No.</th>
<th>Weight %</th>
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</thead>
<tbody>
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<td>Polyvinyl Acetate</td>
<td>9003-20-7</td>
<td>100</td>
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</tbody>
</table>

4. FIRST AID MEASURES

General Advice: Poison information centres in each State capital city can provide additional assistance for scheduled poisons (13 1126)

Skin Contact: Wash off immediately with soap and plenty of water removing all contaminated clothes and shoes. Get medical attention if irritation develops.

Eye Contact: Flush eye with water for 15 minutes. Get medical attention if irritation occurs. If symptoms persist, call a physician.

Inhalation: Move to fresh air. If breathing is difficult, give oxygen. In case of shortness of breath, give oxygen. Get medical attention.

Product code: P1800  Product name: Polyvinyl Acetate (A.W. Approx. 100, 000)
Ingestion: Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person. Consult a physician if necessary.

Notes to Physician: Treat symptomatically

5. FIRE-FIGHTING MEASURES

Flammable Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flashpoint (°C/°F)</td>
<td>No information available.</td>
</tr>
<tr>
<td>Tested according to:</td>
<td>Not available</td>
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<tr>
<td>Lower Explosion Limit (%)</td>
<td>No information available</td>
</tr>
<tr>
<td>Upper Explosion Limit (%)</td>
<td>No information available</td>
</tr>
<tr>
<td>Autoignition Temperature (°C/°F)</td>
<td>426 °C/798.8 °F</td>
</tr>
</tbody>
</table>

Suitable Extinguishing Media: Carbon dioxide (CO2). Dry chemical. Water spray mist or foam.

Unsuitable Extinguishing Media: No information available.

Hazardous Combustion Products: Carbon monoxide; Carbon dioxide

Specific hazards: May be combustible at high temperatures.

Special Protective Equipment for Firefighters: As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

Specific Methods: No information available.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions: Ensure adequate ventilation. Use personal protective equipment. Avoid contact with skin, eyes and clothing. Remove all sources of ignition.

Environmental Precautions: No information available.

Methods for Cleaning Up: Sweep up and shovel into suitable containers for disposal. Clean contaminated surface thoroughly.

7. HANDLING AND STORAGE

Handling

Technical Measures/Precautions: Provide sufficient air exchange and/or exhaust in work rooms. Keep away from incompatible materials.
Safe Handling Advice:
Wear personal protective equipment. Avoid contact with skin, eyes and clothing. Do not ingest. Keep away from heat and sources of ignition. Handle in accordance with good industrial hygiene and safety practice.

Storage

Technical Measures/Storage Conditions:
Keep container tightly closed in a dry and well-ventilated place. Store at room temperature in the original container. Store away from incompatible materials.

Incompatible Products:
Oxidizing agents. Bases.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering measures to reduce exposure: Ensure adequate ventilation. 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 Protective Equipment

Eye protection: Safety glasses. Safety glasses with side-shields.

Skin and body protection: Long sleeved clothing. Chemical resistant apron. Gloves.

Respiratory protection: No personal respiratory protective equipment normally required. Use a dust respirator under conditions where exposure to the substance is apparent (e.g. generation of high concentration of dust (dust clouds), inadequate ventilation, development of respiratory tract irritation), and engineering controls are not feasible. Be sure to use an approved/certified respirator or equivalent.

Hygiene measures: Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product. When using, do not eat, drink or smoke.

National occupational exposure limits

United States

U.S Occupational Exposure Limits: Not determined

<table>
<thead>
<tr>
<th>Components</th>
<th>OSHA</th>
<th>NIOSH</th>
<th>ACGIH</th>
<th>AIHA WHEEL</th>
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</table>

Canada

Canada Occupational Exposure Limits: Not determined

<table>
<thead>
<tr>
<th>Components</th>
<th>Alberta</th>
<th>British Columbia</th>
<th>Ontario</th>
<th>Quebec</th>
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<td>9003-20-7</td>
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Australia and Mexico

Occupational Exposure Limits for Australia and Mexico: Not determined

<table>
<thead>
<tr>
<th>Components</th>
<th>Australia</th>
<th>Mexico</th>
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<tbody>
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<td>Polyvinyl Acetate</td>
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<tr>
<td>9003-20-7</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state: Solid.

Odor: None.

Flash point (°C): Not applicable

Autoignition Temperature (°C/°F): 426 °C/798.8 °F

Boiling point/range(°C/°F): No information available

Density (g/cm3): No information available

Evaporation rate: No information available

Odor threshold (ppm): No information available

Solubility:
- Insoluble in water
- Soluble in Ethanol
- Soluble in Acetone
- Soluble in Chloroform
- Soluble in Benzene
- Soluble in Carbon tetrachloride
- Soluble in polar organic solvents
- Soluble in Methylene Chloride
- Soluble in Trichloroethylene
- Insoluble in higher alcohols
- Insoluble in aliphatic hydrocarbons
- Insoluble in Carbon disulfide
- Insoluble in Cyclohexane
- Insoluble in oils
- Insoluble in fats

Appearance: Beads. Pellets.

Taste: Tasteless.

Decomposition temperature(°C/°F): No information available

Specific gravity: 1.18-1.19 @ 15 °C

Vapor density: No information available

VOC content (g/L): No information available

Miscibility: No information available

10. STABILITY AND REACTIVITY

Stability: Stable at normal conditions

Conditions to avoid: Heat. Ignition sources.

Materials to avoid: Strong oxidising agents. Strong bases.

Hazardous decomposition products: Carbon monoxide. Carbon dioxide.

Possibility of Hazardous Reactions: No information available

Polymerization: Hazardous polymerisation does not occur

Product code: P1800

Product name: Polyvinyl Acetate (A.W. Approx. 100,000)
11. TOXICOLOGICAL INFORMATION

Acute Toxicity

Component Information

*Polyvinyl Acetate - 9003-20-7*

- **LD50/oral/rat =** >25000 mg/kg
- **LD50/oral/mouse =** >25000 mg/kg
- **LD50/dermal/rabbit =** No information available
- **LD50/dermal/rat =** No information available
- **LC50/inhalation/rat =** No information available
- **LC50/inhalation/mouse =** No information available
- **Other LD50 or LC50 information =**
  - No information available

Product Information

- **LC50/inhalation/rat =** No information available
- **LC50/inhalation/mouse =** No information available
- **LD50/dermal/rabbit =** No information available
- **LD50/dermal/rat =** No information available
- **LD50/oral/mouse =** No information available
- **LD50/oral/rat =** >25000 mg/kg

Local Effects

- **Skin irritation:** May cause skin irritation.

- **Eye irritation:** Contact with eyes may cause irritation.

- **Inhalation:** Health injuries are not known or expected under normal use.

- **Ingestion:** Causes digestive (gastrointestinal) tract irritation.

- **Sensitization:** No information available

Chronic Toxicity

- **Chronic Toxicity:**
  - No information available

- **Carcinogenic effects:** Not considered carcinogenic. Not classifiable as to its carcinogenicity to humans.

<table>
<thead>
<tr>
<th>Components</th>
<th>NTP</th>
<th>IARC</th>
<th>OSHA HCS - Carcinogens</th>
<th>ACGIH - Carcinogens</th>
<th>Australia - Prohibited Carcinogenic Substances</th>
<th>Australia - Notifiable Carcinogenic Substances</th>
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</thead>
</table>

**Mutagenic Effects:**

- No information available

**Product code:** P1800  **Product name:** Polyvinyl Acetate (A.W. Approx. 100,000)
Reproductive Effects: No information available
Teratogenic Effects: No information available
Target Organs: No information available

12. ECOLOGICAL INFORMATION

ECOTOXICITY

Toxicity to terrestrial and aquatic plants and animals: No information available
Ecotoxicity effects: No data available.
Aquatic toxicity: No information available
Mobility: No information available
Persistence and degradability: No information available
Bioaccumulative potential: Low No information available

13. DISPOSAL CONSIDERATIONS

Waste from residues / unused products:
Waste must be disposed of in accordance with Federal, State and Local regulation.

Contaminated packaging:
Empty containers should be taken for local recycling, recovery or waste disposal

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<tbody>
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</tr>
</tbody>
</table>

14. TRANSPORT INFORMATION

DOT

UN-No: Not regulated
Proper Shipping Name: No information available
Hazard Class: No information available
Packing Group: None
Subsidiary Risk: Not applicable
Marine Pollutant: No data available
ERG No: No information available
DOT RQ (lbs): No information available

TDG (Canada)

UN-No: Not regulated
Proper Shipping Name: No information available
Hazard Class: No information available
Packing Group: No information available
Subsidiary Risk: No information available
Description: No information available

ADR

UN-No: Not regulated
Proper Shipping Name: No information available
Hazard Class: No information available

Product code: P1800 Product name: Polyvinyl Acetate (A.W. Approx. 100, 000)
Packing Group: No information available
Subsidiary Risk: No information available
Classification Code: No information available
Description: No information available
CEFIC Tremcard No: No information available

IMO / IMDG
UN-No: Not regulated
Proper Shipping Name: No information available
Hazard Class: No information available
Packing Group: No information available
Subsidiary Risk: No information available
Description: No information available
IMDG Page: No information available
Marine Pollutant: No information available
MFAG: No information available
Maximum Quantity: No information available

RID
UN-No: Not regulated
Proper Shipping Name: No information available
Hazard Class: No information available
Packing Group: No information available
Subsidiary Risk: No information available
Classification Code: No information available
Description: No information available

ICAO
UN-No: Not regulated
Proper Shipping Name: No information available
Hazard Class: No information available
Packing Group: No information available
Subsidiary Risk: No information available
Description: No information available

IATA
UN-No: Not regulated
Proper Shipping Name: No information available
Hazard Class: No information available
Packing Group: No information available
Subsidiary Risk: No information available
Description: No information available

15. REGULATORY INFORMATION

International Inventories

<table>
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<tr>
<th>Components</th>
<th>U.S. TSCA</th>
<th>Philippines (PICCS)</th>
<th>KOREA KECL</th>
<th>Japan ENCS</th>
<th>CHINA</th>
<th>Australia (AICS)</th>
<th>EINECS-No.</th>
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<td>KE-00028</td>
<td>(6)-295</td>
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<td>Present</td>
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U.S. Regulations


Chemicals Known to the State of California to Cause Cancer:
This product does not contain a chemical requiring a warning under California Prop. 65. (See table below)
Chemicals Known to the State of California to Cause Reproductive Toxicity:
This product does not contain a chemical requiring a warning under California Prop. 65. (See table below)

<table>
<thead>
<tr>
<th>Components</th>
<th>Carcinogen</th>
<th>Developmental Toxicity</th>
<th>Male Reproductive Toxicity</th>
<th>Female Reproductive Toxicity</th>
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CERCLA/SARA

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<tr>
<th>Components</th>
<th>CERCLA - Hazardous Substances and their Reportable Quantities</th>
<th>Section 302 Extremely Hazardous Substances and TPQs</th>
<th>Section 302 Extremely Hazardous Substances and RQs</th>
<th>Section 313 - Chemical Category</th>
<th>Section 313 - Reporting de minimis</th>
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<tbody>
<tr>
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U.S. TSCA

<table>
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<tr>
<th>Components</th>
<th>TSCA Section 5(a)2 - Chemicals With Significant New Use Rules (SNURS)</th>
<th>TSCA 8(d) -Health and Safety Reporting</th>
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<tbody>
<tr>
<td>Polyvinyl Acetate</td>
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<td>Not Applicable</td>
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</tbody>
</table>

Canada

WHMIS hazard class:
Non-controlled

Canada Controlled Products Regulation:
This product has been classified according to the hazard criteria of the CPR (Controlled Products Regulation) and the MSDS contains all of the information required by the CPR.

Inventory

<table>
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<tr>
<th>Components</th>
<th>Canada (DSL)</th>
<th>Canada (NDSL)</th>
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<table>
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<tr>
<th>Components</th>
<th>CEPA Schedule I - Toxic Substances</th>
<th>CEPA - 2010 Greenhouse Gases Subject to Manditory Reporting</th>
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<tbody>
<tr>
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</tr>
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</table>

EU Classification

R-phrase(s)
not determined

S-phrase(s)
none

The product is classified in accordance with Annex VI to Directive 67/548/EEC

Indication of danger:
Not dangerous

Product code: P1800  Product name: Polyvinyl Acetate (A.W. Approx. 100, 000)
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. The physical properties reported in this MSDS are obtained from the literature and do not constitute product specifications. Information contained herein does not constitute a warranty, whether expressed or implied, as to the safety, merchantability or fitness of the goods for a particular purpose. Spectrum Chemicals & Laboratory Products, Inc. assumes no responsibility for results obtained or for incidental or consequential damages, including lost profits, arising from the use of these data. No warranty against infringement of any patent, copyright or trademark is made or implied. 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 assumes no responsibility for the completeness or accuracy of the information contained herein.