

# Material Safety Data Sheet



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<b>Product name</b>	Celvol® Polyvinyl alcohol, copolymer		NA/EN
<b>MSDS number</b>	80524	<b>Revision Date</b>	Jun.25.2009
<b>Revision Number</b>	1	<b>Issuing date</b>	Aug.06.2009

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## 1. Product and company identification

**Product name**

**Celvol® Polyvinyl alcohol, copolymer**

**Sekisui Specialty Chemicals America, LLC**  
1603 West LBJ Freeway, Suite 200  
Dallas, TX 75234

For information, telephone +1-972-443-8901  
www.sekisui-sc.com

**Transportation emergency phone numbers:**  
For Chemical Emergency: Spill Leak Fire Exposure or Accident  
Call CHEMTREC Day or Night  
DOMESTIC NORTH AMERICA 800-424-9300  
INTERNATIONAL, CALL +1 703-527-3887 (collect calls accepted)

### **End use:**

Chemical intermediate (including monomers), Auxiliary for leather, Auxiliary for textil, packaging, Surfactant, Adhesives industry, Food industry

## 2. Hazards identification

### **Emergency Overview**

CAUTION!  
Dust from this product can form an explosive organic dust cloud.

### **Product Description**

#### **Appearance**

<b>Form</b>	Powder
<b>Odor</b>	odorless
<b>Colour</b>	white

### **Potential health effects**

**Routes of exposure**  
Skin, eyes, inhalation, ingestion.

### **Immediate effects**

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<b>Inhalation</b>	May cause respiratory tract irritation Symptoms of exposure may include: Nasal discharge, hoarseness, coughing, chest pain and breathing difficulty
<b>Skin</b>	Essentially non-irritating.
<b>Eyes</b>	Particulates may cause mechanical irritation. Symptoms of exposure may include: Eye irritation or burning sensation.
<b>Ingestion</b>	Essentially non-toxic.

### Target organ effects

Overexposure (prolonged or repeated exposure) may cause:  
Irritation of the respiratory tract  
Local irritation at the site of exposure

### Medical conditions which may be aggravated by exposure:

Significant exposure to this chemical may adversely affect people with acute or chronic disease of the:  
Respiratory Tract

## 3. Composition/information on ingredients

Components	CAS-No	Percent %
Acetic acid ethenyl ester, polymer with ethenol	25213-24-5	92 - 95

The following specific grades of Celvol are covered by this MSDS:

203 PV ALCOHOL; 203S PV ALCOHOL; 205 PV ALCOHOL; 205S PV ALCOHOL; 418 PV ALCOHOL; 425 PV ALCOHOL; 430 PV ALCOHOL; 443 PV ALCOHOL; 502 PV ALCOHOL; 502S PV ALCOHOL; 504 PV ALCOHOL; 508 PV ALCOHOL; 513 PV ALCOHOL; 513S PV ALCOHOL; 518 PV ALCOHOL; 523 PV ALCOHOL; 523S PV ALCOHOL; 528 PV ALCOHOL; 530 PV ALCOHOL; 540 PV ALCOHOL; 540S PV ALCOHOL; 540TV PV ALCOHOL; 603 PV ALCOHOL; 6107 PV ALCOHOL; 711 PV ALCOHOL; 805 PV ALCOHOL; 818 PV ALCOHOL; 823 PV ALCOHOL; 830 PV ALCOHOL; 831 PV ALCOHOL; 840 PV ALCOHOL; 50-42N PV ALCOHOL; WS-53NF PV ALCOHOL; WS-724 PV ALCOHOL

Specific technical information on a Celvol grade should be obtained from the sales specification sheet available at [www.sekisui-sc.com](http://www.sekisui-sc.com)

## 4. First aid measures

### General Information

Wash contaminated clothing before re-use.

### Inhalation

Move to fresh air in case of accidental inhalation of vapors. If symptoms persist, call a physician.

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**Skin**  
Wash off immediately with plenty of water for at least 15 minutes. If symptoms persist, call a physician.

**Eyes**  
Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Immediate medical attention is required.

**Ingestion**  
If swallowed, seek medical advice immediately and show this container or label. Do not induce vomiting without medical advice. Call a physician immediately.

## **5. Fire-fighting measures**

**NFPA:**      **Health:** 0                              **Flammability:** 1                              **Instability:** 0

**Suitable extinguishing media**  
alcohol-resistant foam, carbon dioxide (CO<sub>2</sub>), Dry chemical

**Extinguishing media which must not be used for safety reasons**  
Do not use a solid water stream as it may scatter and spread fire.

**Special exposure hazards arising from the substance or preparation itself, its combustion products, or released gases**  
Under conditions giving incomplete combustion, hazardous gases produced may consist of carbon monoxide carbon dioxide (CO<sub>2</sub>)  
Combustion gases of organic materials must in principle be graded as inhalation poisons

**Special protective equipment for fire-fighters**  
flame retardant protective clothing. self-contained breathing apparatus (EN 133).

**Other Information**  
Cool containers / tanks with water spray Thoroughly decontaminate bunker gear and other fire-fighting equipment before re-use

## **6. Accidental release measures**

**Personal precautions**  
Avoid contact with the skin and the eyes. Do not breathe dust. Forms slippery surfaces with water.

Keep unnecessary people away; isolate hazard area and deny entry.

**Environmental precautions**  
Prevent further leakage or spillage. Do not discharge into the drains/surface waters/groundwater.

**Methods for cleaning Up**  
Shovel or sweep up. Keep in suitable, closed containers for disposal. Dispose of in accordance with local regulations. Avoid dust formation.

## **7. Handling and storage**

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## **7. Handling and storage**

### **Handling**

#### **Advice on safe handling**

Use adequate ventilation. Keep containers tightly closed in a dry, cool and well-ventilated place. Avoid dust formation.

#### **Protection - fire and explosion:**

The powder can explode if mixed in air and ignited in a confined space. If unconfined, ignition will give rise to a Class A fire. Care should be taken to prevent the accumulation of dust. Dust is an explosion hazard. However, the explosive hazard is highly dependent on particle size; the finer the particles, the higher the explosion strength. Emptying of bags of powder directly into vessels where flammable vapors exist should be strictly prohibited because static discharges can be generated of sufficient strength to produce an explosion.

### **Storage**

#### **Technical measures/Storage conditions**

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

#### **Material storage**

Store at room temperature in the original container. Keep away from reactive metals (sodium, zinc, copper, calcium, etc.).

#### **Incompatible products**

Keep away from: concentrated peroxides perchlorates strong oxidizing agents

## **8. Exposure controls / personal protection**

### **OSHA Exposure Limits**

### **ACGIH Exposure Limits**

### **Mexico National Exposure Limits**

### **Exposure controls**

#### **Engineering measures**

General or dilution ventilation is frequently insufficient as the sole means of controlling employee exposure. Local ventilation is usually preferred.

#### **Protective Equipment**

A safety shower and eyebath should be readily available.

#### **General advice**

Avoid contact with skin and eyes. Do not breathe dust. Use only in an area equipped with a safety shower. Hold eye wash fountain available.

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## Respiratory protection

Based on workplace contaminant level and working limits of the respirator, use a respirator approved by NIOSH. The following is the minimum recommended equipment for an occupational exposure level. To estimate an occupational exposure level see Section 8 and Section 11.

For concentrations > 1 and < 10 times the occupational exposure level: Use air-purifying respirator with full facepiece and organic vapor cartridge(s) or air-purifying full facepiece respirator with an organic vapor canister or a full facepiece powered air-purifying respirator fitted with organic vapor cartridge(s). The air purifying element must have an end of service life indicator, or a documented change out schedule must be established. Otherwise, use supplied air.

For concentrations more than 10 times the occupational exposure level and less than the lower of either 100 times the occupational exposure level or the IDLH: Use Type C full facepiece supplied-air respirator operated in positive-pressure or continuous-flow mode.

For concentrations > 100 times the occupational exposure level or greater than the IDLH level or unknown concentrations (such as in emergencies): Use self-contained breathing apparatus with full facepiece in positive-pressure mode or Type C positive-pressure full facepiece supplied-air respirator with an auxiliary positive-pressure self-contained breathing apparatus escape system.

For escape: Use self-contained breathing apparatus with full facepiece or any respirator specifically approved for escape.

## Skin protection:

Wear impervious clothing and gloves to prevent contact. Neoprene is recommended. Other protective material may be used, depending on the situation, if adequate degradation and permeation data is available. If other chemicals are used in conjunction with this chemical, material selection should be based on protection for all chemicals present.

## Eye/face protection:

Wear chemical goggles when there is a reasonable chance of eye contact..

## 9. Physical and chemical properties

### Appearance

<b>Form</b>	Powder
<b>Colour</b>	white
<b>Odor</b>	odorless
<b>Melting point/range</b>	230 - 240°C
<b>Bulk density</b>	0.61-0.67 g/cm <sup>3</sup> 20°C
<b>pH</b>	Neutral
<b>Water solubility</b>	hot water

## 10. Stability and reactivity

### Stability

Stable

### Conditions to avoid

Avoid dust formation

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**Materials to avoid**

Keep away from:  
 oxygen  
 peroxides  
 perchlorates  
 nitrates  
 oxidizing agents  
 Keep away from reactive metals (sodium, zinc, copper, calcium, etc.)

**Hazardous Combustion or Decomposition Products:**

Thermal decomposition products may include oxides of carbon.

**Hazardous reactions**

Hazardous polymerization does not occur.

**11. Toxicological information**

**Acetic acid ethenyl ester, polymer with ethenol**

<b>Oral</b>	LD50: > 5000 mg/kg, rat
<b>Inhalation</b>	LC50: > 20 mg/m <sup>3</sup> , rat, 1h
<b>Skin irritation</b>	No skin irritation.
Species	rabbit
<b>Skin Sensitization</b>	nonsensitizer
Species	guinea pig
Method	Maximization
<b>Eye Irritation</b>	Mild eye irritation
Species	rabbit eye
<b>Carcinogenic effects</b>	No evidence of carcinogenicity respiratory tract epithelium
Study	inhalation study (28 months)
<b>in vitro Mutagenicity</b>	Ames test - negative
<b>in vivo Mutagenicity</b>	Mouse micronucleus - negative

**12. Ecological information**

**Acetic acid ethenyl ester, polymer with ethenol**

<b>Toxicity to fish</b>	LC50: 10 mg/l (96h)
Species	Lepomis macrochirus (Bluegill sunfish)
Species	LC50: 40 mg/l (96h)
Species	Pimephales promelas (Fathead minnow)
<b>Toxicity to daphnia</b>	EC50: 8.3 mg/l (48h) EC50: 8.3 mg/l (96h)
Species	Daphnia magna
<b>Toxicity to bacteria</b>	EC50: 50 mg/l (17h)
Method	DIN 38412 T.8
<b>Biodegradation</b>	90 %

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## Acetic acid ethenyl ester, polymer with ethenol

Method	OECD 302 B (Zahn-Wellens Test)
<b>Chemical Oxygen Demand (COD)</b>	1640 mg/l

## 13. Disposal considerations

### **Disposal Considerations:**

Dispose of spilled material in accordance with state and local regulations for waste that is non-hazardous by Federal definition. Note that this information applies to the material as manufactured; processing, use, or contamination may make this information inappropriate, inaccurate, or incomplete.

Note that this handling and disposal information may also apply to empty containers, liners and rinsate. State or local regulations or restrictions are complex and may differ from federal regulations. This information is intended as an aid to proper handling and disposal; the final responsibility for handling and disposal is with the owner of the waste.

## 14. Transport information

**US Department of Transportation** Not regulated

**TDG** Not regulated

**ICAO/IATA** not restricted

**IMDG** Not regulated

## 15. Regulatory information

### U.S. STATE REGULATIONS

Chemicals associated with the product which are subject to the state right-to-know regulations are listed along with the applicable state(s):  
none

### U.S. FEDERAL REGULATIONS

#### **TSCA Inventory:**

We certify that all components are either on the TSCA inventory or qualify for an exemption.

#### **Environmental Regulations:**

#### **SARA 311:**

<b>Acute health:</b>	No
<b>Chronic health:</b>	No
<b>Fire:</b>	No

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**Sudden release of pressure:** No  
**Reactive:** No

## INTERNATIONAL REGULATIONS

### **International Chemical Inventory**

Listed on the chemical inventories of the following countries or qualifies for an exemption:  
AUSTRALIA, CHINA, CANADA, KOREA, PHILIPPINES, JAPAN

## 16. Other information

### **Prepared By**

Product Stewardship Department  
Sekisui Specialty Chemicals

NFPA: Health: 0 Flammability: 1 Instability: 0  
HMIS: Health: 0 Flammability: 1 Physical hazard: 0

For more information, other material safety data sheets or technical data sheets, please consult the Sekisui Specialty Chemicals home page at [www.sekisui-sc.com](http://www.sekisui-sc.com)

### **Sources of key data used to compile the datasheet**

Information contained in this safety data sheet is based on Sekisui Specialty Chemical owned data and public sources deemed valid or acceptable. The absence of data elements required by ANSI or 1907/2006 indicates, that no data meeting these requirements is available.

Changes against the previous version are marked by \*\*\*

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