

Product name Celvol® Polyvinyl alcohol, EU/EN

copolymer

MSDS number80524Revision DateJun.25.2009Revision Number1Issuing dateJun.27.2009

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1._Identification of the substance/preparation and the company/undertaking

Product name

Celvol® Polyvinyl alcohol, copolymer

Manufacturer, importer, supplier

Sekisui Specialty Chemicals Europe S.L.

Crta. N-340, Km.1157 Apartado 1388 43080 Tarragona, SPAIN

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

Emergency telephone number

For Chemical Emergency: Spill Leak Fire Exposure or Accident Call CHEMTREC Day or Night 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

Statements of hazard The product does not require a hazard warning label in accordance with EC

Directives.

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

In closed containers, due to development of heat, vapours from Methanol and Methyl acetate could collect in the empty space of the container, therefore keep

closed containers away from ignition sources and from open fires

3. Composition/information on ingredients

Chemical characterization Polyvinyl alcohol Vinyl polymer

Components	CAS-No	EC-No.	Classification	Percent %



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Methanol	67-56-1	200-659-6	F;R11 T;R23/24/25- 39/23/24/25	0.1 - 1
Acetic acid ethenyl ester, polymer with ethenol	25213-24-5	•	None	92 - 95

Remarks 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; 518 PV ALCOHOL; 523 PV ALCOHOL; 523S PV ALCOHOL; 528 PV ALCOHOL; 530 PV ALCOHOL; 540 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

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.

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.

Notes to physician

Treatment Treat symptomatically.

5. Fire-fighting measures

Suitable extinguishing media

alcohol-resistant foam. carbon dioxide (CO2). 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.



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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 (CO2)

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.

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

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

Material storage

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

Technical measures/Storage conditions

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

Incompatible products

Keep away from:, concentrated peroxides, perchlorates, strong oxidizing agents

German storage class

13: Non-flammable solids.



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8. Exposure controls / personal protection

EC Exposure Limit Values

Components	EU TWA	
Methanol	260 mg/m ³	200 PPM

Methanol

Skin Designation Can be absorbed through the skin.

National occupational exposure limits (Germany)

Components	TRGS 900 (AGW)		STEL Factor
Respirable Dust	3 mg/m³		2
Total Dust	10 mg/m ³		2
Methanol	270 mg/m ³	200 PPM	4

Methanol

Skin designation Components of the product may be absorbed into the body through the skin

ACGIH Exposure Limits

Components	TWA
Respirable Dust	3 mg/m³
Total Dust	10 mg/m³
Methanol	200 PPM

Components	STEL
Methanol	250 PPM

Engineering measures General or dilution ventilation is frequently insufficient as the sole means of

controlling employee exposure. Local ventilation is usually preferred.

Personal protective equipment

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.

Hygiene measures When using, do not eat, drink or smoke. Take off all contaminated clothing

immediately. Wash hands before breaks and immediately after handling the

product.



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Respiratory protectionNo personal respiratory protective equipment normally required. If the dust

exposure limit is exceeded, wear dust mask. Equipment should conform to EN 136

or EN 140 and EN 143.

Eye protection Tightly fitting safety goggles. Equipment should conform to EN 166.

skin protection protective suit

Hand protection Chemicals resistant gloves

Suitable material nitrile rubber **Reference substance** Pentaerythritol

Type Fleximax (Company COMASEC) or comparable article;

or refer to glove manufacturer's recommendation

Evaluation according to EN 374: level 6

Material thickness approx 0.55 mm

Break through time 480 min

Suitable material PVC / nitril rubber **Reference substance** Pentaerythritol

Type Multiplus (Company COMASEC) or comparable article;

or refer to glove manufacturer's recommendation

Evaluation according to EN 374: level 6

Material thickness approx 0.9 mm Break through time > 480 min

9. Physical and chemical properties

Appearance

Form Powder Colour white Odor odorless

Melting point/range 230 - 240°C

Bulk density 0.61-0.67 g/cm³ 20°C

pH NeutralWater solubility hot water

10. Stability and reactivity

Stability Stable

Conditions to avoid Avoid dust formation.

Materials to avoid Keep away from:, oxygen, peroxides, perchlorates, nitrates, oxidizing agents,

Keep away from reactive metals (sodium, zinc, copper, calcium, etc.)

Thermal decomposition Thermal decomposition can take place above 200°C. Thermal decomposition

products may include oxides of carbon.



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Hazardous reactions Hazardous polymerization does not occur.

11. Toxicological information

Acetic acid ethenyl ester, polymer with ethenol

Oral LD50: > 5000 mg/kg, rat Inhalation LC50: > 20 mg/m 3 , rat, 1h

Skin irritation No skin irritation

Species rabbit

Skin Sensitization nonsensitizer

Species guinea pig
Method Maximization
Mild eye irritation

Species rabbit eye

Carcinogenic effects No evidence of carcinogenicity respiratory tract epithelium

Study inhalation study (28 months)

in vitro Mutagenicity Ames test - negative

in vivo Mutagenicity Mouse micronucleus - negative

12. Ecological information

Eye Irritation

Acetic acid ethenyl ester, polymer with ethenol

Toxicity to fish LC50: 10 mg/l (96h)

Species Lepomis macrochirus (Bluegill sunfish)

LC50: 40 mg/l (96h)

Species Pimephales promelas (Fathead minnow)

Toxicity to daphnia EC50: 8.3 mg/l (48h) EC50: 8.3 mg/l (96h)

Species Daphnia magna **Toxicity to bacteria** EC50: 50 mg/l (17h)

Method DIN 38412 T.8

Biodegradation 90 %

Method OECD 302 B (Zahn-Wellens Test)

Chemical Oxygen Demand (COD) 1640 mg/l

13. Disposal considerations

Product information Disposal required in compliance with all waste management related state and

local regulations. The choice of the appropriate method of disposal depends on the product composition by the time of disposal as well as the local statutes and

possibilities for disposal..

Uncleaned empty packaging Contaminated packaging should be emptied as far as possible and after

appropriate cleansing may be taken for reuse..



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14. Transport information

ADR/RID Not regulated

ADNR Not regulated

ADNR: Container and Tanker

ICAO/IATA not restricted

IMDG Not regulated

15. Regulatory information

Labelling in accordance with EC directives

The product does not require a hazard warning label in accordance with EC directives/the relevant national laws.

S-phrase(s)

S22 - Do not breathe dust.

S26 - In case of contact with eyes, rinse immediately with plenty of water and seek

medical advice.

S51 - Use only in well-ventilated areas

Water Hazard Class (WGK):

WGK Class 1 WGK Reg-Nr. 5095

WGK Source Classification according to VwVwS, Annex 3

Information based on the main component

Methanol 67-56-1

Directive 76/769/EEC Listed.
Directive 98/24/EC Listed.

16. Other information

R-phrase(s)

R11 - Highly flammable.

R23/24/25 - Toxic by inhalation, in contact with skin and if swallowed.

R39/23/24/25 - Toxic: danger of very serious irreversible effects through inhalation, in contact with skin and if swallowed.



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For further information, see:

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

Changes against the previous version are marked by ***

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.

Further information

This information is based on our present state of knowledge. It shall describe our products regarding safety requirements and shall not be construed as a guarantee or statement of condition and/or quality.