

**Safety data sheet**  
according to 1907/2006/EC, Article 31

Printing date 18.10.2016

Version number 5

Revision: 18.10.2016

**SECTION 1: Identification of the substance/mixture and of the company/undertaking**

- **Date of compilation:** 13.12.2010
- **1.1 Product identifier**
  - **Trade name:** SELVOL™ Polyvinyl alcohol, homopolymer
  - **Synonym(s):**  
Grade: 103, E 103, 107, E 107, 125, 125NS, 125S, 165, 165SF, 305, E 305, 310, E 310, 325, E 325, 325 LA, E 325 LA ,E 325S, 350, 825
  - **EINECS/ELINCS/NLP Number:**  
Polymer
- **1.2 Relevant identified uses of the substance or mixture and uses advised against**  
No further relevant information available.
- **Application of the substance / the preparation:**  
Chemical intermediate (including monomers), Auxiliary for leather, Auxiliary for textil, packaging, Surfactant, Adhesives industry, Food industry
- **1.3 Details of the supplier of the safety data sheet**
  - **Manufacturer / Supplier:**  
Sekisui Specialty Chemicals Europe S.L. Tel. +34 (9775) 49899  
Carretera Nacional 340 Km. 1157 Fax +34 (9775) 44982  
Apartado 1388
  
  - 43080 Tarragona, SPAIN
- **E-mail address of the competent person responsible for the Safety Data Sheet:** MSDS@sekisui-sc.com
- **Informing department:** Sales / Technique
- **1.4 Emergency telephone number:** +1 703 527 3887

**SECTION 2: Hazards identification**

- **2.1 Classification of the substance or mixture**
  - **Classification according to Regulation (EC) No 1272/2008**  
The substance is not classified as hazardous according to the CLP regulation.
  - **Classification according to Directive 67/548/EEC or Directive 1999/45/EC**
  - **Classification system:**  
The product does not have to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.
- **2.2 Label elements**
  - **Labelling according to Regulation (EC) No 1272/2008** Void
  - **Hazard pictograms** Void
  - **Signal word** Void
  - **Hazard statements** Void
- **Additional information:**  
Safety data sheet available on request.
- **2.3 Other hazards**
  - **Results of PBT and vPvB assessment**
  - **PBT:** Not applicable.
  - **vPvB:** Not applicable.

**SECTION 3: Composition/information on ingredients**

- **3.1 Chemical characterisation: Substances**
  - **CAS No. Designation:**  
9002-89-5 Ethenol, homopolymer 92 - 95 %
  - **Identification number(s):** void, polymer
  - **EC number:** Polymer

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**· Dangerous components:**

CAS: 67-56-1 EINECS: 200-659-6 Index number: 603-001-00-X Reg.nr.: 01-2119433307-44-XXXX	Methanol  T R23/24/25-39/23/24/25; F R11 Flam. Liq. 2, H225; Acute Tox. 3, H301; Acute Tox. 3, H311; Acute Tox. 3, H331; STOT SE 1, H370	≤ 0.9%
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**· Additional information:** For the wording of the listed hazard phrases refer to section 16.

**SECTION 4: First aid measures**

- **4.1 Description of first aid measures**
- **General information:** Take off contaminated clothing.
- **After inhalation:** Supply fresh air; consult doctor in case of symptoms.
- **After skin contact:**  
Rinse with plenty of water.  
If skin irritation continues, consult a doctor.
- **After eye contact:**  
Rinse opened eye for several minutes under running water. If symptoms persist, consult doctor.
- **After swallowing:**  
Do NOT induce vomiting.  
Rinse out mouth and then drink plenty of water.  
In case of persistent symptoms consult doctor.
- **4.2 Most important symptoms and effects, both acute and delayed** No further relevant information available.
- **4.3 Indication of any immediate medical attention and special treatment needed** symptomatic treatment

**SECTION 5: Firefighting measures**

- **5.1 Extinguishing media**
- **Suitable extinguishing agents**  
Carbon dioxide (CO<sub>2</sub>), extinguishing powder or water spray/fog. Fight larger fires with water spray/fog or alcohol-resistant foam.
- **For safety reasons unsuitable extinguishing agents** Water with a full water jet.
- **5.2 Special hazards arising from the substance or mixture**  
Can be released in case of fire:  
Carbon monoxide (CO) and Carbon dioxide (CO<sub>2</sub>)  
Formation of toxic gases is possible during heating or in case of fire.
- **5.3 Advice for firefighters**
- **Protective equipment:**  
Wear full protective suit.  
Wear self-contained breathing apparatus.
- **Additional information**  
Cool endangered containers with water spray jet.  
Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.

**SECTION 6: Accidental release measures**

- **6.1 Personal precautions, protective equipment and emergency procedures**  
Ensure adequate ventilation.  
Wear protective clothing and keep away unprotected persons.  
Avoid contact with skin and eyes.  
Do not breathe dust.  
Product forms slippery surface when combined with water.

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- **6.2 Environmental precautions:**  
Do not allow to enter drainage system, surface or ground water.  
Prevent from spreading (e.g. by damming-in or oil barriers).
- **6.3 Methods and material for containment and cleaning up:**  
Ensure adequate ventilation.  
Collect mechanically.  
Prevent formation of dust.  
Send for recovery or disposal in suitable containers.  
Dispose of the material collected according to regulations.
- **6.4 Reference to other sections**  
See Section 7 for information on safe handling  
See Section 8 for information on personal protection equipment.  
See Section 13 for information on disposal.

**SECTION 7: Handling and storage**

- **7.1 Precautions for safe handling**  
Ensure good ventilation/exhaustion at the workplace.  
Prevent formation of dust.  
Avoid contact with skin and eyes.  
Make sure that all applicable workplace limits are observed.  
Do not breathe dust.
- **Information about protection against explosions and fires:**  
Keep ignition sources away - Do not smoke.  
Protect from heat.
- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage**
- **Requirements to be met by storerooms and containers:**  
Observe all local and national regulations for storage of water polluting products.
- **Information about storage in one common storage facility:**  
Store away from foodstuffs.  
Store away from oxidizers.
- **Further information about storage conditions:**  
Store container in a well ventilated position.  
Keep container tightly sealed.  
Store in cool, dry conditions in well sealed containers.
- **7.3 Specific end use(s)** No further relevant information available.

**SECTION 8: Exposure controls/personal protection**

- **Additional information about design of technical systems:** No further data; see item 7.
- **8.1 Control parameters**
- **Components with critical values that require monitoring at the workplace:**  
Observe all workplace limits for dust.

**67-56-1 Methanol**

WEL (Great Britain)	Short-term value: 333 mg/m <sup>3</sup> , 250 ppm Long-term value: 266 mg/m <sup>3</sup> , 200 ppm Sk
IOELV (European Union)	Long-term value: 260 mg/m <sup>3</sup> , 200 ppm Skin

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<b>· DNELs</b>		
<b>67-56-1 Methanol</b>		
<i>Dermal</i>	<i>DNEL acute / short-term exposure - systemic effect</i>	8 mg/kg bw/d (general population) 40 mg/kg bw/d (worker)
	<i>DNEL long-term exposure - systemic effects</i>	8 mg/kg bw/d (general population) 40 mg/kg bw/d (worker)
	<i>DNEL acute / short-term exposure - local effects</i>	5445 mg/cm <sup>2</sup> (alga (chlamydomonas reinhardii))
<i>Inhalative</i>	<i>DNEL acute / short-term exposure - systemic effect</i>	260 mg/m <sup>3</sup> (worker)
	<i>DNEL long-term exposure - systemic effects</i>	260 mg/m <sup>3</sup> (worker)
	<i>DNEL long-term exposure - local effects</i>	260 mg/m <sup>3</sup> (worker)

<b>· PNECs</b>	
<b>67-56-1 Methanol</b>	
<i>PNEC</i>	20.8 mg/l (aqua (freshwater)) (Assessment factor 10) 1540 mg/l (aqua (intermittent releases)) (Assessment factor 10) 2.08 mg/l (aqua (marine water)) (Assessment factor 100) 100 mg/l (STP (sewage treatment plant)) (Assessment factor 10)
<i>PNEC</i>	77 mg/kg (sediment (freshwater)) 7.7 mg/kg (sediment (marine water)) 3.18 mg/kg (soil)

· **Additional information:** The lists that were valid during the compilation were used as basis.

· **8.2 Exposure controls**

· **Personal protective equipment**

· **General protective and hygienic measures**

Keep away from foodstuffs, beverages and food.

Wash hands during breaks and at the end of the work.

Use skin protection cream for preventive skin protection.

Do not eat, drink or smoke while working.

· **Breathing equipment:**

If all workplace limits are observed and good ventilation is ensured, no special precautions necessary.

· **Protection of hands:**

Protective gloves

To avoid skin problems reduce the wearing of gloves to the required minimum.

Check the permeability prior to each renewed use of the glove.

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation.

Sensibilisation by the components in the glove materials is possible.

· **Material of gloves**

Butyl rubber - BR

Natural rubber - NR

· **Penetration time of glove material**

Protective gloves should be replaced at first signs of wear.

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

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- **Eye protection:** Safety glasses
- **Body protection:** Body protection must be chosen depending on activity and possible exposure.
- **Limitation and supervision of exposure into the environment**  
Do not allow to enter drainage system, surface or ground water.

**SECTION 9: Physical and chemical properties**

· **9.1 Information on basic physical and chemical properties**

· **General Information**

· **Appearance:**

- **Form:** solid
- **Colour:** off white
- **Smell:** characteristic
- **Odour threshold:** not determined

· **pH-value (40 g/l) at 20 °C:** 5 - 7

· **Change in condition**

- **Melting point/Melting range:** 230 - 240 °C  
not determined
- **Boiling point/Boiling range:** not determined

· **Flash point:** not applicable

· **Inflammability (solid, gaseous)** not determined

· **Ignition temperature:** not determined

· **Decomposition temperature:** not determined

· **Self-inflammability:** Product is not selfigniting.

· **Danger of explosion:** Product is not explosive.

· **Critical values for explosion:**

- **Lower:** not determined
- **Upper:** not determined

· **Oxidising properties** not classified as oxidising

· **Vapor pressure:** not applicable

· **Density:** not determined

· **Bulk density at 20 °C:** 610 - 670 kg/m<sup>3</sup>

· **Relative density** not determined

· **Vapour density (AIR = 1):** not determined

· **Evaporation rate** not applicable

· **Solubility in / Miscibility with**

· **Water:** soluble in hot water

· **Partition coefficient (n-octanol/water):** not determined

· **Viscosity:**

- **dynamic:** not applicable
- **kinematic:** not applicable

· **9.2 Other information** Further informations please refer to technical data sheet.

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**SECTION 10: Stability and reactivity**

- **10.1 Reactivity** No further relevant information available.
- **10.2 Chemical stability**
- **Thermal decomposition / conditions to be avoided:**  
No decomposition if used according to specifications.  
Avoid impact, friction, heat, sparks, electrostatic charges.
- **10.3 Possibility of hazardous reactions** No dangerous reactions known.
- **10.4 Conditions to avoid** No further relevant information available.
- **10.5 Incompatible materials:** Strong oxidizing agents
- **10.6 Hazardous decomposition products:** Carbon monoxide (CO) and Carbon dioxide (CO<sub>2</sub>)

**SECTION 11: Toxicological information**

- **11.1 Information on toxicological effects**
- **Acute toxicity** Based on available data, the classification criteria are not met.

- **LD/LC50 values that are relevant for classification:**

**67-56-1 Methanol**

Oral	LD50	5628 mg/kg (rat)
Dermal	LD50	15800 mg/kg (rabbit)
Inhalative	LC50/4 h	6.4 mg/l (rat)

**9002-89-5 Polyvinyl alcohol**

Oral	LD50	> 5000 mg/kg (rat)
Dermal	LD50	> 7490 mg/kg (rabbit)

- **Primary irritant effect:**
- **Skin corrosion/irritation** Dust particles may mechanically irritate the skin.
- **Serious eye damage/irritation** Dust particles may mechanically irritate the eye.
- **Respiratory or skin sensitisation** Based on available data, the classification criteria are not met.
- **Other information (about experimental toxicology):** Ames test: negative
- **Sensitisation** No sensitizing effect known.
- **Repeated dose toxicity** According to information currently no known toxic effects
- **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**
- **Germ cell mutagenicity** Based on available data, the classification criteria are not met.
- **Carcinogenicity** Based on available data, the classification criteria are not met.
- **Reproductive toxicity** Based on available data, the classification criteria are not met.
- **STOT-single exposure** Based on available data, the classification criteria are not met.
- **STOT-repeated exposure** Based on available data, the classification criteria are not met.
- **Aspiration hazard** Based on available data, the classification criteria are not met.

**SECTION 12: Ecological information**

- **12.1 Toxicity**

- **Aquatic toxicity:**

**67-56-1 Methanol**

LC50/96 h	15400 mg/l (bluegill (leporis macrochirus))
EC50/48 h	24500 mg/l (daphnia)

**9002-89-5 Polyvinyl alcohol**

LC50/96 h	> 10000 mg/l (bluegill (leporis macrochirus))
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LC50/48 h	> 40000 mg/l (fathead minnow ( <i>pimephales promelas</i> )) 7900 mg/l ( <i>Ceriodaphnia dubia</i> (water flea)) 8300 mg/l (water flea ( <i>daphnia magna</i> ))
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- **12.2 Persistence and degradability** No further relevant information available.
- **Other information:**  
Biodegradability 90 %  
OECD 302 B (Zahn-Wellens test)
- **12.3 Bioaccumulative potential BCF:** < 10
- **12.4 Mobility in soil** No further relevant information available.
- **Additional ecological information:**  
· **Chemical Oxygen Demand (COD-value):** 1700 mg O<sub>2</sub>/g  
· **Biochemical Oxygen Demand (BOD5-value):** not determined  
· **AOX-indication:** The product does not contain organically bounded halogens (AOX-free).
- **12.5 Results of PBT and vPvB assessment**  
· **PBT:** Not applicable.  
· **vPvB:** Not applicable.
- **12.6 Other adverse effects** No further relevant information available.

**SECTION 13: Disposal considerations**

- **13.1 Waste treatment methods**
- **Recommendation** Disposal must be made according to official regulations.
- **European waste catalogue:**  
Waste disposal key numbers from EWC have to be assigned depending on origin and processing.
- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to official regulations.

**SECTION 14: Transport information**

· <b>14.1 UN-Number</b> · <b>ADR, IMDG, IATA</b>	Void
· <b>14.2 UN proper shipping name</b> · <b>ADR, IMDG, IATA</b>	Void
· <b>14.3 Transport hazard class(es)</b> · <b>ADR, IMDG, IATA</b> · <b>Class</b>	Void
· <b>14.4 Packing group</b> · <b>ADR, IMDG, IATA</b>	Void
· <b>14.6 Special precautions for user</b>	Not applicable.
· <b>14.7 Transport in bulk according to Annex II of Marpol and the IBC Code</b>	Not applicable.
· <b>Transport/Additional information:</b>	Not dangerous according to the above specifications.
· <b>UN "Model Regulation":</b>	Void

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**SECTION 15: Regulatory information**

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **Directive 2012/18/EU**
- **Seveso category** void
- **National regulations**
- **Information about limitation of use:** Employment restrictions concerning young persons must be observed.
- **Decree to be applied in case of technical fault:** Directive 2012/18/EU does not apply.
- **Water hazard class:**  
Water hazard class 1 (Classification according to German VwVws, Annex 3): slightly hazardous for water
- **Other regulations, limitations and prohibitive regulations**
- **Substances of very high concern (SVHC) according to REACH, Article 57**  
This mixture does not contain any substances, that are included in the candidate list for eventual authorisation.
- **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

**SECTION 16: Other information**

These data are based on our present knowledge. However, they shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- **Reasons for changes:**  
The Material Safety Data Sheet has been revised. Changes in the respective chapters are characterized in the left side edge by \*.
- **Relevant phrases**

H225	Highly flammable liquid and vapour.
H301	Toxic if swallowed.
H311	Toxic in contact with skin.
H331	Toxic if inhaled.
H370	Causes damage to organs.
.....	
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.
- **Department issuing SDS:**  
C.S.B. GmbH Phone: +49 - 2151 - 652086-0  
Düsseldorfer Str. 113 Fax: +49 - 2151 - 652086-9  
47809 Krefeld / Germany
- **Abbreviations and acronyms:**  
RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)  
ICAO: International Civil Aviation Organisation  
ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)  
IMDG: International Maritime Code for Dangerous Goods  
IATA: International Air Transport Association  
GHS: Globally Harmonised System of Classification and Labelling of Chemicals  
EINECS: European Inventory of Existing Commercial Chemical Substances  
ELINCS: European List of Notified Chemical Substances  
CAS: Chemical Abstracts Service (division of the American Chemical Society)  
DNEL: Derived No-Effect Level (REACH)  
PNEC: Predicted No-Effect Concentration (REACH)  
LC50: Lethal concentration, 50 percent

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*LD50: Lethal dose, 50 percent*

*PBT: Persistent, Bioaccumulative and Toxic*

*SVHC: Substances of Very High Concern*

*vPvB: very Persistent and very Bioaccumulative*

*Flam. Liq. 2: Flammable liquids – Category 2*

*Acute Tox. 3: Acute toxicity – Category 3*

*STOT SE 1: Specific target organ toxicity (single exposure) – Category 1*

· **Sources:** These data are based on information submitted by pre-suppliers.

· **\* Data compared to the previous version altered.**

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