

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

Printing date 20.10.2011

Version number 2

Revision: 20.10.2011

### 1 Identification of the substance/mixture and of the company/undertaking

- **Date of issue:** 29.03.2010
- **Product identifier**
- **Trade name:** SELVOL™ (Celvol®) Polyvinyl alcohol, tackified
- **Synonym(s):** Grade: MH-82, ML-7, MM-14, MM-51, MM-81
- **Relevant identified uses of the substance or mixture and uses advised against**
- **Application of the substance / the preparation:** *Chemical intermediate*
- **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	
- **E-mail address of the competent person responsible for the Safety Data Sheet:** *MSDS@sekisui-sc.com*
- **Informing department:** *Sales / Technics*
- **Emergency telephone number:** *+1 703 527 3887*

### 2 Hazards identification

- **Classification of the substance or mixture**
- **Classification according to Regulation (EC) No 1272/2008**



GHS08 health hazard

- *Repr. 1B H360FD May damage fertility. May damage the unborn child.*
- **Classification according to Directive 67/548/EEC or Directive 1999/45/EC**



T; Toxic

- *R60-61: May impair fertility. May cause harm to the unborn child.*
- **Information concerning particular hazards for human and environment:**  
*In the gas volume of sealed packages vapours of flammable solvents, especially at action of heat, may accumulate. Keep away fire and ignition sources.*
- **Classification system:**  
*The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.*
- **Label elements**
- **Labelling according to Regulation (EC) No 1272/2008**  
*The product is classified and labelled according to the CLP regulation.*
- **Hazard pictograms**



GHS08

- **Signal word** *Danger*
- **Hazard-determining components of labelling:**  
*Boric acid*
- **Hazard statements**  
*H360FD May damage fertility. May damage the unborn child.*  
*Restricted to professional users.*

(Contd. on page 2)

GB

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

Printing date 20.10.2011

Version number 2

Revision: 20.10.2011

**Trade name: SELVOL™ (Celvol®) Polyvinyl alcohol, tackified**

(Contd. of page 1)

· **Precautionary statements**

- P281 Use personal protective equipment as required.  
 P201 Obtain special instructions before use.  
 P202 Do not handle until all safety precautions have been read and understood.  
 P308+P313 IF exposed or concerned: Get medical advice/attention.  
 P405 Store locked up.  
 P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

· **Other hazards**

· **Results of PBT and vPvB assessment**








- **PBT:** Not applicable.  
 · **vPvB:** Not applicable.

### 3 Composition/information on ingredients

· **Chemical characterization: Mixtures**

· **Description:** Mixture of the substances listed below with nonhazardous additions.

· **Dangerous components:**

CAS: 10043-35-3 EINECS: 233-139-2 Index number: 005-007-00-2	Boric acid  T Repr. Cat. 2 R60-61  Repr. 1B, H360FD	5.5-15%
CAS: 67-56-1 EINECS: 200-659-6 Index number: 603-001-00-X	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	0.1-1%

· **SVHC**

10043-35-3	Boric acid
------------	------------

· **Additional information:** For the wording of the listed risk phrases refer to section 16.

### 4 First aid measures

· **Description of first aid measures**

· **General information:** Remove contaminated clothing.

· **After inhalation:** Supply fresh air; consult doctor in case of symptoms.

· **After skin contact:**

Instantly rinse with 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.

If swallowed, seek medical advice immediately and show this container or label.

· **Information for doctor:**

· **Most important symptoms and effects, both acute and delayed** No further relevant information available.

· **Indication of any immediate medical attention and special treatment needed**

No further relevant information available.

GB

(Contd. on page 3)

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

Printing date 20.10.2011

Version number 2

Revision: 20.10.2011

**Trade name: SELVOL™ (Celvol®) Polyvinyl alcohol, tackified**

(Contd. of page 2)

### 5 Firefighting measures

- **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.
- **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>)  
Under certain fire conditions, traces of other toxic gases cannot be excluded.
- **Advice for firefighters**
- **Protective equipment:**  
Wear self-contained breathing apparatus.  
Wear full protective suit.
- **Additional information**  
Cool endangered containers with water spray jet.  
Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.

### 6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**  
Ensure adequate ventilation.  
Avoid causing dust.  
Do not breathe dust.  
Avoid contact with skin and eyes.  
Product forms slippery surface when combined with water.
- **Environmental precautions:** Do not allow to enter drainage system, surface or ground water.
- **Methods and material for containment and cleaning up:**  
Ensure adequate ventilation.  
Collect mechanically.  
Send for recovery or disposal in suitable containers.  
Dispose of the material collected according to regulations.
- **Reference to other sections**  
See Section 8 for information on personal protection equipment.

### 7 Handling and storage

- **Handling**
- **Precautions for safe handling**  
Ensure good ventilation/exhaustion at the workplace.  
Open and handle container with care.  
Avoid contact with skin and eyes.  
Prevent formation of dust.  
Any deposit of dust which cannot be avoided must be removed regularly.  
Do not breathe dust.  
Make sure that all applicable workplace limits are observed.
- **Information about protection against explosions and fires:**  
Dust can combine with air to form an explosive mixture.  
Keep ignition sources away - Do not smoke.  
Protect against electrostatic charges.  
Do not spray on flames or red-hot objects.

(Contd. on page 4)

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

Printing date 20.10.2011

Version number 2

Revision: 20.10.2011

**Trade name: SELVOL™ (Celvol®) Polyvinyl alcohol, tackified**

(Contd. of page 3)

Keep breathing equipment ready.

· **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.

Store away from metals.

· **Further information about storage conditions:**

Keep container tightly sealed.

Store in cool, dry conditions in well sealed containers.

Store container in a well ventilated position.

Store in a locked cabinet or with access restricted to specifically instructed persons.

· **Specific end use(s)** No further relevant information available.

**8 Exposure controls/personal protection**

· **Additional information about design of technical systems:** No further data; see item 7.

· **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

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

· **Exposure controls**

· **Personal protective equipment**

· **General protective and hygienic measures**

Keep away from foodstuffs, beverages and food.

Do not eat, drink or smoke while working.

Pregnant women must strictly avoid inhalation or contact with the skin.

Instantly remove any contaminated garments.

Store protective clothing separately.

Do not carry cleaning cloths impregnated with the product in trouser pockets.

Avoid contact with the eyes and skin.

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

Use skin protection cream for preventive skin protection.

· **Breathing equipment:**

Use breathing protection in case of dust formation.

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.

(Contd. on page 5)

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

Printing date 20.10.2011

Version number 2

Revision: 20.10.2011

**Trade name: SELVOL™ (Celvol®) Polyvinyl alcohol, tackified**

(Contd. of page 4)

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

· **Material of gloves**

*The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.*

· **Penetration time of glove material**

*Penetration time:  $\geq 8$  hours*

*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.*

· **Eye protection:**

*Not required.*

*Safety glasses*

· **Body protection:**

*Protective work clothing*

*Protective clothing should be selected specifically for the working place.*

## 9 Physical and chemical properties

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

· **General Information**

· **Appearance:**

**Form:** Powder

**Colour:** white

· **Smell:** odourless

· **pH-value:** neutral

· **Change in condition**

**Melting point/Melting range:** 230 - 240°C

**Boiling point/Boiling range:** not determined

· **Flash point:** not applicable

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

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

· **Density:** not determined

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

· **Solubility in / Miscibility with**

**Water:** soluble in hot water

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

## 10 Stability and reactivity

· **Reactivity**

· **Chemical stability**

· **Thermal decomposition / conditions to be avoided:**

*No decomposition if used and stored according to specifications.*

*Avoid impact, friction, heat, sparks, electrostatic charges.*

*Temperature over 200°C*

(Contd. on page 6)

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

Printing date 20.10.2011

Version number 2

Revision: 20.10.2011

**Trade name: SELVOL™ (Celvol®) Polyvinyl alcohol, tackified**

(Contd. of page 5)

- **Possibility of hazardous reactions** No dangerous reactions known.
- **Conditions to avoid** No further relevant information available.
- **Incompatible materials:**
  - Strong oxidizing agents
  - Peroxides
  - Oxygen
  - Perchlorates
  - Nitrate
  - Oxidizing agents
  - Metals
- **Hazardous decomposition products:** Carbon monoxide (CO) and Carbon dioxide (CO<sub>2</sub>)

**11 Toxicological information**

- **Information on toxicological effects**
- **Acute toxicity:**

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

**10043-35-3 Boric acid**

Oral	LD50	3450 mg/kg (mouse) 2660 mg/kg (rat)
Inhalative	LC50/4 h	2 mg/l (rat)

- **Primary irritant effect:**
  - **on the skin:** Dust particles may mechanically irritate the skin.
  - **on the eye:** Dust particles may mechanically irritate the eye.
- **Additional toxicological information:**

The product shows the following dangers according to the calculation method of the General EC Classification Guidelines for Preparations as issued in the latest version:

  - Repr. Cat. 2: This product poses a risk for fertility.
  - Repr. Cat. 2: Product should be regarded as if it caused developmental toxicity to humans.
- **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction) Repr. 1B**

**12 Ecological information**

- **Toxicity**
- **Aquatic toxicity:**

**9002-89-5 Polyvinyl alcohol**

LC50/96 h	> 5000 mg/l (danio rerio)
-----------	---------------------------

- **Persistence and degradability** No further relevant information available.
- **Behaviour in environmental systems:**
  - **Bioaccumulative potential** No further relevant information available.
  - **Mobility in soil** No further relevant information available.
- **Additional ecological information:**
- **General notes:**
  - Do not allow product to reach ground water, water bodies or sewage system.
  - Water hazard class 1 (Self-assessment): slightly hazardous for water
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

(Contd. on page 7)

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

Printing date 20.10.2011

Version number 2

Revision: 20.10.2011

**Trade name: SELVOL™ (Celvol®) Polyvinyl alcohol, tackified**

· **Other adverse effects** No further relevant information available.

(Contd. of page 6)

### 13 Disposal considerations

- **Waste treatment methods**
- **Recommendation** Disposal must be made according to official regulations.
- **Waste disposal key number:** According to local/national 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.

### 14 Transport information

- |  |  |
|--|--|
| · <b>UN-Number</b><br>· <b>ADR, ADN, IMDG, IATA</b>                                    | Void   |
| · <b>UN proper shipping name</b><br>· <b>ADR, ADN, IMDG, IATA</b>                      | Void   |
| · <b>Transport hazard class(es)</b><br>· <b>ADR, ADN, IMDG, IATA</b><br>· <b>Class</b> | Void   |
| · <b>Packing group</b><br>· <b>ADR, IMDG, IATA</b>                                     | Void   |
| · <b>Special precautions for user</b>  | Not applicable.                                      |
| · <b>Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code</b>       | Not applicable.                                      |
| · <b>Transport/Additional information:</b>   | Not dangerous according to the above specifications. |
| · <b>UN "Model Regulation":</b>  | -  |

### 15 Regulatory information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **Labelling according to Regulation (EC) No 1272/2008**  
The product is classified and labelled according to the CLP regulation.
- **Hazard pictograms**



GHS08

- **Signal word** Danger
- **Hazard-determining components of labelling:**  
Boric acid
- **Hazard statements**  
H360FD May damage fertility. May damage the unborn child.

(Contd. on page 8)

GB

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

Printing date 20.10.2011

Version number 2

Revision: 20.10.2011

**Trade name: SELVOL™ (Celvol®) Polyvinyl alcohol, tackified**

(Contd. of page 7)

*Restricted to professional users.*

· **Precautionary statements**

- P281 Use personal protective equipment as required.  
 P201 Obtain special instructions before use.  
 P202 Do not handle until all safety precautions have been read and understood.  
 P308+P313 IF exposed or concerned: Get medical advice/attention.  
 P405 Store locked up.  
 P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

· **National regulations**

· **Information about limitation of use:**

- Employment restrictions concerning young persons must be observed.  
 Employment restrictions concerning pregnant and lactating women must be observed.  
 Employment restrictions concerning women of child-bearing age must be observed.

· **Decree to be applied in case of technical fault:**

- Quantity limits according to "EC Seveso directive" should be observed.

· **Water hazard class:** Water hazard class 1 (Self-assessment): slightly hazardous for water

· **Other regulations, limitations and prohibitive regulations**

- Observe restrictions on the marketing and use according to Annex XVII of Regulation (EC) No 1907/2006.  
 Observe all local and national regulations concerning storage of toxic products.

· **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

## 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.*

· **Relevant phrases**

*The(se) R- resp. H-phrase(s) are those of the ingredient(s) and do(es) not necessarily represent the classification of the preparation.*

- H225 Highly flammable liquid and vapour.  
 H301 Toxic if swallowed.  
 H311 Toxic in contact with skin.  
 H331 Toxic if inhaled.  
 H360FD May damage fertility. May damage the unborn child.  
 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.  
 R60 May impair fertility.  
 R61 May cause harm to the unborn child.

· **Department issuing MSDS:**

C.S.B. GmbH Phone: +49 - 2151 - 652086-0  
 Parkstraße 29 Fax: +49 - 2151 - 652086-9  
 D-47829 Krefeld  
 Germany

· **Abbreviations and acronyms:**

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)  
 RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)  
 IMDG: International Maritime Code for Dangerous Goods

(Contd. on page 9)



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

Printing date 20.10.2011

Version number 2

Revision: 20.10.2011

**Trade name: SELVOL™ (Celvol®) Polyvinyl alcohol, tackified**

(Contd. of page 8)

*IATA: International Air Transport Association*

*ICAO: International Civil Aviation Organization*

*GHS: Globally Harmonized System of Classification and Labelling of Chemicals*

*LC50: Lethal concentration, 50 percent*

*LD50: Lethal dose, 50 percent*

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

GB