

## Celvol® E 5/99 Polyvinyl Alcohol

### DESCRIPTION

**CELVOL E 5/99** is a low viscosity fully hydrolysed polyvinyl alcohol which finds applications principally in the Adhesive, Paper and Textile industries.

### COMMERCIAL SPECIFICATIONS

IT 06-04-101 P

Test	Specification	Method	Internal Reference	International Reference
Viscosity <sup>(a)</sup> (cps)	5.0 - 6.0	Brookfield	IT 06-06-225 P	ISO 2555
Degree of Hydrolysis Mol %	98.5 - 99.8	Titration	IT 06-06-224 P	
Ash <sup>(b)</sup> Wt %	0.7 Max.	Conductimetry	IT 06-06-220 P	
Volatile Wt %	5.0 Max.	Drying	IT 06-06-221 P	
pH <sup>(c)</sup>	5.0 - 7.0	Potentiometry	IT 06-06-226 P	ISO 1148

(a) Of a 4% aqueous solution at 20°C (b) Expressed as Sodium Oxide (c) Of a 4% aqueous solution

### GENERAL PROPERTIES

Appearance .....	Off white granular solid
Refractive Index $n_D^{20^\circ C}$ .....	1.52 - 1.55
Specific gravity .....	1.27 - 1.31
Specific heat (J/g K) .....	1.65 - 1.67
Thermal conductivity (W/m C) .....	~2
Mean coefficient of thermal expansion at 0-45°C ( $\times 10^{-5} / ^\circ C$ ) .....	7-10
Glass transition temperature (°C) .....	85
Melting point (°C) .....	230
Light stability .....	Excellent
Electrical resistivity ( $\Omega \text{ cm} \times 10^7$ ) .....	3.1 - 3.8

### APPLICATIONS

**Adhesives:** PVAc Emulsions for wood,paper, packaging and building.

**Paper:** Surface sizing ; Pigment coating ; Thermal paper ; Antigrease treatment.

**Textiles:** Cotton yarn sizing ; Spun yarn sizing ; Finishing ; Non wovens.

**Others:** Ceramics binder and coating ; Water soluble films.

### PACKAGING

**CELVOL E 5/99** can be made available in the following packaging:

- 25 Kg Antistatic Polyethylene bags palletised on CP1 pallets 1.25 TM (shrink wrapped or stretch wrapped) 4 way entry pallets.
- 500 Kg and 1000 Kg Polypropylene Rafia Big Bag palletised on 90 x 90 cm (stretch wrapped) 4 way entry pallets.
- Bulk transportation vehicles 20 - 25 TM Maximum.
- Other packaging may be available on request.



## STORAGE

CELVOL E 5/99 Polyvinyl alcohol is stable over a long period of storage under dry conditions.

## TRANSPORT

Not regulated.

## HEALTH , SAFETY , ENVIRONMENT

Please refer to the CELVOL Material Safety Data Sheet for the product.

## OTHER INFORMATION

- Customs Tarif No: 3905.3000.
- Polyvinyl alcohol is registered in the following inventories: AICS (Australia), CEPA DSL (Canada), TSCA (United States), MITI (Japan), AUSTRIA, CHINA, PHILIPPINES and SOUTH KOREA.
- CAS NUMBER: 9002-89-5

## FOOD CONTACT STATUS

CELVOL E 5/99 conforms to various FDA and BfR regulations for use in food contact applications. The user should check the regulation corresponding to the proposed application, in order to verify that the CELVOL grade to be used is within the specified limitations. For more details the user is invited to contact our customer service department.

### North America

Sekisui Specialty Chemicals America, LLC  
1603 West LBJ Freeway, Suite 200  
Dallas, TX 75234 USA  
Tel: +1-972-277-2900  
Fax: +1-972-277-2907

### Europe

Sekisui Specialty Chemicals Europe, S.L.  
Ctra. N-340, Km 1157  
Apartado 1388  
43080 Tarragona, Spain  
Tel: + 34-977-548-899  
Fax: + 34-977-544-982

[www.sekisui-sc.com](http://www.sekisui-sc.com)

To the best of our knowledge, the information contained herein is accurate. However Sekisui assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material and whether there is any infringement of patents is the sole responsibility of the user. All chemicals may present unknown health hazards and should be used with caution. Although certain hazards may be described in this publication, we cannot guarantee that these are the only hazards that exist. Users of any chemical should satisfy themselves by independent investigation of current scientific and medical knowledge that the material can be used safely. In addition, no certification or claim is made as to the status, under any law or regulation, including but not limited to the Toxic Substances Control Act of either the chemicals discussed above or any subsequent polymerization or reaction products that result from a formulation containing them.