

Celvol® E 513 Polyvinyl Alcohol

DESCRIPTION

CELVOL E 513 is a medium viscosity partially hydrolysed polyvinyl alcohol which finds applications principally in the Adhesives, Paper and Textile industries.

COMMERCIAL SPECIFICATIONS

IT 06-04-101 P

Test	Specification	Method	Internal Reference	International Reference
Viscosity ^(a) (cps)	13.0 - 15.0	Brookfield	IT 06-06-225 P	ISO 2555
Degree of Hydrolysis Mol %	86.0 - 89.0	Titration	IT 06-06-224 P	
Ash ^(b) Wt %	0.7 Max.	ISE	IT 06-06-200 P	
Volatile Wt %	5.0 Max.	Drying	IT 06-06-221 P	
Methanol Wt%	0,9 Max	GC-HS	IT 06-06-217 P	
VOC Wt%	1,0 Max	GC-HS	IT 06-06-217 P	
pH ^(c)	4.5 - 6.5	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	White to 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)	58
Melting point (°C)	180
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 ; Remoistenables.

Paper: Antigrease treatment.

Textiles: Spun yarn sizing / Synthetic ; Filament yarn sizing ; Finishing ; Printing.

Others: Ceramics binder and coating ; Protective strip coatings ; Mould release polyester / silicone ; Water soluble films.

PACKAGING

CELVOL E 513 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 513 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: 25213-24-5

FOOD CONTACT STATUS

CELVOL E 513 conforms with various FDA and BGA 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.

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