

DuPont™ Elvanol® 80-18

POLYVINYL ALCOHOL

Product Data Sheet

Description

Elvanol® 80-18 is a unique copolymer of polyvinyl alcohol and another monomer. Elvanol® 80-18 is designed to provide cold-water solubility in the final product when reacted properly with caustic.

Typical Properties of Elvanol® 80-18

Viscosity, cps ¹	17.0-23.0
Solution, pH	5.0-7.0
Volatiles, wt. % max.	5.0
Ash, wt. % max. ²	0.70

¹ Viscosity in mPa.s (cP) of a 4% solids aqueous solution at 20°C (68°F)

² Dry basis, calculated as % Na₂O

Suggested Uses

While Elvanol® 80-18 is not cold water soluble as supplied, it is appropriate for use in applications that require quick dissolution of the final product in cold water. Those applications include films for sachets to contain detergents or other products to be processed in cold water solutions. This may eliminate contact with chemicals, or provide pre-measured dosage.

In order to have that cold water solubility, the Elvanol® 80-18 must be reacted with the proper ratio of caustic. Contact your DuPont technical representative for further details.

FDA Status

Elvanol® 80-18 polyvinyl alcohol complies with U.S. Food and Drug Administration (FDA) Regulations under the following Sections of Title 21 CFR, and may be used in contact with food, subject to the limitations and requirements therein:

- 175.105 – Adhesives.

Safety & Handling

Read and understand the Materials Safety Data Sheet (MSDS) before using this product. Elvanol® 80-18 is technical quality polyvinyl alcohol. It is not recommended for inclusion in any food or preparation, which might be taken internally.

Under certain conditions of use, dust may be formed from Elvanol® polyvinyl alcohol. DuPont recommends that dust from Elvanol® be treated as a nuisance dust, which is regulated by the Occupational Safety and Health Administration (OSHA) under Title 29, Code of Federal Regulations Section 1910.1000. Under this section, an employee's exposure to nuisance dust shall be limited to 15 milligrams per cubic meter (mg/m³) of total dust and 5 mg/m³ of respirable dust on a time-weighted average in any 8-hour shift of a 40-hour week.

The DuPont limit for polyvinyl alcohol exposure to nuisance dust is 10 mg/m³, and for respirable dust is 5 mg/m³. If excessive concentrations of dust are encountered, a mask or respirator and goggles should be worn. The mask or respirator should comply with Section 1910.134 of the OSHA regulations; the goggles should comply with Section 1910.133.

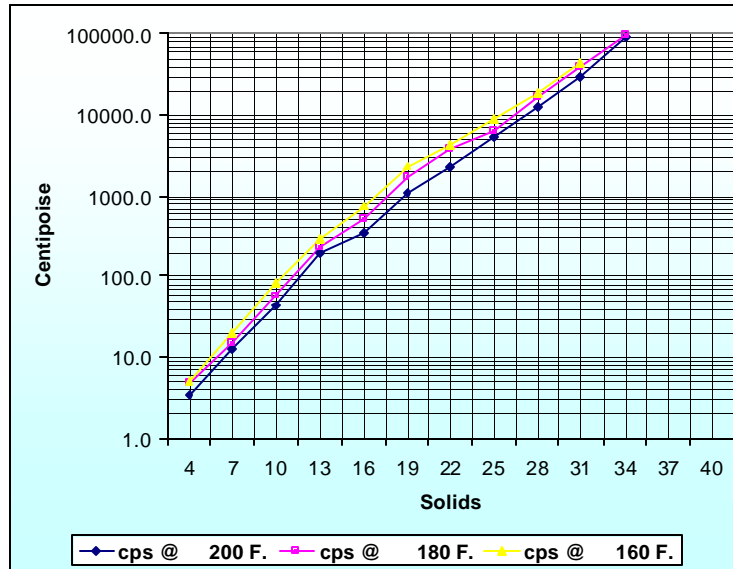
For bulk storage and handling of Elvanol® (e.g. storage silos) refer to *Elvanol® Bulk Storage and Handling Safety Guide*.

Elvanol® may be disposed of by incineration or landfill. However, any disposal method must be in compliance with all applicable local, state and federal regulations.



The miracles of science

Viscosity Data on Elvanol® 80-18



DuPont Offices Worldwide

Americas

DuPont Company, BMP26-2363
Lancaster Pike & Route 141
Wilmington, DE 19805 U.S.A.
Telephone +1 302 774 1161
Toll-free (USA) 800 628 6208
Fax +1 302 892 7390

DuPont do Brasil, S.A.
Alameda Itapecuru, 506
06454-080 Barueri, SP Brasil
Telephone +55 11 4166 8542
Fax +55 11 4166 8720

Asia Pacific

DuPont China Holding Co, Ltd.
15th Floor, Shui on Plaza
333 Huai Hai Road (Central)
Shanghai 200021, China
Telephone +86 21 6386 6366
Fax +65 6272 7494

Europe / Middle East / Africa

DuPont de Nemours Int'l. S.A.
2, Chemin du Pavillon Box 50
CH-1218 Le Grand Saconnex
Geneva, Switzerland
Telephone +41 22 717 51 11
Fax +41 22 717 55 00

Elvanol.dupont.com

Copyright © 2006 DuPont. All rights reserved. The technical data herein are guides to the use of DuPont resins. The advice contained herein is based upon tests and information believed to be reliable, but users should not rely upon it absolutely for specific applications because performance properties will vary from lot to lot and with processing conditions. It is given and accepted at user's risk and confirmation of its validity and suitability in particular cases should be obtained independently. The DuPont Company makes no guarantees of results and assumes no obligations or liability in connection with its advice.

This publication is not to be taken as a license to operate under, or recommendation to infringe, any patents CAUTION: Do not use in medical applications involving permanent implantation in the human body. For other medical applications, see DuPont Medical Caution Statement, H-50102.

The DuPont Oval, DuPont™, The miracles of science™, and Elvanol® are trademarks or registered trademarks of DuPont or its affiliates. Doc. Ref. NOL_8018_0601_v3



The miracles of science™