

DuPont™ Elvaloy® AC 1820

Elvaloy® AC resins Product Data Sheet

Description

Product Description Elvaloy® AC 1820 is a copolymer of ethylene and methyl acrylate. It is available in pellet form for use in conventional extrusion equipment designed to process polyethylene type resins.

Restrictions

Material Status • Commercial: Active

Typical Characteristics

Composition 20% By Weight Methyl Acrylate

Typical Properties

Physical	Nominal Values	Test Method(s)	
Density ()	0.942 g/cm ³	ASTM D792	ISO 1183
Melt Flow Rate (190°C/2.16kg)	8 g/10 min	ASTM D1238	ISO 1133
Thermal	Nominal Values	Test Method(s)	
Melting Point (DSC)	92°C (198°F)	ASTM D3418	ISO 3146
Vicat Softening Point ()	54°C (129°F)	ASTM D1525	ISO 306

Processing Information

General

Maximum Processing Temperature 310°C (590°F)
General Processing Information Elvaloy® AC 1820 is normally processed at melt temperatures ranging from 235°C - 310°C (455°F - 590°F) in extrusion coating or cast film equipment. A typical extrusion coating extruder temperature profile is given below. Actual processing temperatures will be determined by either the specific equipment or one of the other polymers in a coextrusion. Elvaloy® AC 1820 can also be used in cast extrusions and coextrusions. It is easily processed on standard equipment used for low density polyethylene.

Extrusion Coating/Lamination Processing **Nominal Values**

Extrusion Processing Information	A suggested extrusion set temperature profile
Feed Zone	185°C (365°F)
Second Zone	235°C (455°F)
Third Zone	260°C (500°F)
Fourth Zone	285°C (545°F)

Fifth Zone	285°C (545°F)
Adapter Zone	285°C (545°F)
Die Zone	285°C (545°F)

FDA Status Information

Elvaloy® AC 1820 resin complies with the U. S. Food and Drug Administration regulation 21 CFR 177.1340, Ethylene-methyl acrylate copolymer resins, for use in contact with all types of food, subject to meeting the migration limits specified in paragraph (b).

Regulatory Information

For information on regulatory compliance outside of the U.S., consult your local DuPont representative.

Safety & Handling

Elvaloy® AC resins as supplied by DuPont are not considered hazardous materials. As with any hot material, care should be taken to protect the hands and other exposed parts of the body when handling molten polymer. At recommended processing temperatures, small amounts of fumes may evolve from the resins. When resins are overheated, more extensive decomposition may occur. Adequate ventilation should be provided to remove fumes from the work area. Disposal of scrap presents no special problems and can be by landfill or incineration in a properly operated incinerator. Disposal should comply with local, state, and federal regulations. Resin pellets can be a slipping hazard. Loose pellets should be swept up promptly to prevent falls. For more detailed information on the safe handling and disposal of DuPont resins, a Material Safety Data Sheet can be obtained from the DuPont Packaging and Industrial Polymers website or by contacting your sales representative.

Read and Understand the Material Safety Data Sheet (MSDS) before using this product

Regional Centres

DuPont operates in more than 70 countries. For help finding a local representative, please contact one of the following regional customer contact centers:

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 +1 302-999-4399

DuPont do Brasil, S.A.
Alameda Itapecuru, 506
06454-080 Barueri, SP Brasil
Telephone +55 11 4166 8122
Fax +55 11 4166 8720

Asia Pacific

DuPont China Holding Co., Ltd.
Shanghai Branch
399 Keyuan Road, Bldg. 11
Zhangjiang Hi-Tech Park
Pudong New District, Shanghai
P.R. China (Postcode: 201203)
Telephone +86 21 3862 2888
Fax +86-21-3862-2889

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

<http://elvaloy.dupont.com>

The data listed here fall within the normal range of properties, but they should not be used to establish specification limits nor used alone as the basis of design. The DuPont Company assumes no obligations or liability for any advice furnished or for any results obtained with respect to this information. All such advice is given

CAUTION: Do not use DuPont materials in medical applications involving implantations in the human body or contact with internal body fluids or tissues unless the material has been provided from DuPont under a written contract that is consistent with DuPont policy regarding medical applications and expressly acknowledges the contemplated

and accepted at the buyer's risk. The disclosure of information herein is not a licence to operate under, or a recommendation to infringe, any patent of DuPont or others. Since DuPont cannot anticipate all variations in actual end-use conditions, DuPont makes no warranties and assumes no liability in connection with any use of this information.

use. For further information, please contact your DuPont representative. You may also request a copy of DuPont POLICY Regarding Medical Applications H-50103-3 and DuPont CAUTION Regarding Medical Applications H-50102-3.

Copyright © 2009 DuPont. The DuPont Oval Logo, DuPont™, The miracles of science™, and trademarks designated with "®" are registered trademarks or trademarks of E.I. du Pont de Nemours and Company or its affiliates. All rights reserved.

This data sheet is effective as of 05/05/2009 11:21:07 AM and supersedes all previous versions.