

DuPont™ Elvaloy® PTW

Elvaloy® resins Product Data Sheet

Description

Product Description	Elvaloy® PTW is an ethylene terpolymer, used as an Impact Modifier for a variety of polymers.
---------------------	---

Restrictions

Material Status	<ul style="list-style-type: none"> Commercial: Active
-----------------	--

Typical Characteristics

Uses	<ul style="list-style-type: none"> Polymer Modifier
Characteristics / Benefits	General purpose toughener for a variety of polymers. Promotes toughening of PET.
Applications	When used in a CPET tray formulation, Elvaloy® PTW provides both toughening and increases the melt strength of the PET.

Typical Properties

Physical	Nominal Values	Test Method(s)	
* Density ()	0.94 g/cm ³	ASTM D792	ISO 1183
* Melt Flow Rate (190°C/2.16kg)	12 g/10 min	ASTM D1238	ISO 1133
Thermal	Nominal Values	Test Method(s)	
* Melting Point (DSC)	72°C (162°F)	ASTM D3417	ISO 3146

Processing Information**General**

* Maximum Processing Temperature	310°C (590°F)
General Processing Information	<p>Optimizing Use Level:</p> <p>This material is an ethylene terpolymer that is most effective when it is well dispersed into a polymer. The single screw or twin-screw extrusion equipment used to melt and pump the molten polymer provides the dispersive mixing. Increasing the loading of the ethylene terpolymer in the polymer makes it more difficult to develop the required degree of dispersion. The best improvement in cold temperature impact resistance may occur at an intermediate loading in the case where the extrusion equipment has limited mixing capabilities. On single screw extruders, increasing the screw speed has been found to improve the quality of the dispersion and observed tray toughness.</p> <p>Handling/Storage of Concentrate:</p> <p>Elvaloy® PTW is supplied in polyethylene bag lined boxes or bags. The product does not require drying but the material should be handled in a way that minimizes</p>

moisture pick-up. For example reseal bags or box liners when partial bags or boxes are not being used.

Feeding Extruder:

The melting point of the Elvaloy® PTW is 72°C (162°F) so a split feed single screw extrusion feed hopper will be required in cases where the temperature of a hot dried polymer such as PET exceeds the melting point of the Elvaloy® PTW.

FDA Status Information

ELVALOY® PTW Resin Modifier complies with Food and Drug Administration Regulation 21 CFR 175.105 - - Adhesives. This Regulation describes adhesives that may be used as components of articles intended for use in packaging, transporting, or holding food, subject to the limitations and requirements therein.

ELVALOY® PTW Resin Modifier may be used at up to a level of 7 percent in crystallized polyethylene terephthalate (CPET) trays that will hold food for microwave and conventional oven heating. Such use may be properly said to comply fully with the Federal Food, Drug, and Cosmetic Act and all applicable food additive regulations.

The information and certifications provided herein are based on data we believe to be reliable, to the best of our knowledge. The information and certifications apply only to the specific material designated herein as sold by DuPont and do not apply to use in any process or in combination with any other material. They are provided at the request of and without charge to our customers. Accordingly, DuPont cannot guarantee or warrant such certifications or information and assumes no liability for their use.

Regulatory Information

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

Articles made with PET or other thermoplastics modified with small amounts of Elvaloy® PTW should be tested to confirm they comply with applicable food contact regulations in your region.

The information and certifications provided herein are based on data we believe to be reliable, to the best of our knowledge. The information and certifications apply only to the specific material designated herein as sold by DuPont and do not apply to use in any process or in combination with any other material. They are provided at the request of and without charge to our customers. Accordingly, DuPont cannot guarantee or warrant such certifications or information and assumes no liability for their use.

Safety & Handling

For information on appropriate Handling & Storage of this polymeric resin, please refer to the Material Safety Data Sheet..

A Product Safety Bulletin, Material Safety Data Sheet, and/or more detailed information on extrusion processing and/or compounding of this polymeric resin for specific applications are available from your DuPont Packaging and Industrial Polymers 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
Chestnut Run Plaza – Bldg. 730
974 Centre Road

Asia Pacific

DuPont China Holding Co., Ltd.
Shanghai Branch
399 Keyuan Road, Bldg. 11

Europe / Middle East / Africa

DuPont de Nemours Int'l. S.A.
2,Chemin du Pavillon Box 50
CH-1218 Le Grand Saconnex

Wilmington, Delaware
19805 U.S.A.
Toll-Free (USA): 1-800-628-6208
Telephone: 1-302-774-1000
Fax: 1-302-355-4013

Zhangjiang Hi-Tech Park
Pudong New District, Shanghai
P.R. China (Postcode: 201203)
Telephone +86 21 3862 2888
Fax +86-21-3862-2889

Geneva, Switzerland
Telephone +41 22 717 51 11
Fax +41 22 717 55 00

DuPont do Brasil, S.A.
Alameda Itapecuru, 506
06454-080 Barueri, SP Brasil
Telephone: +55 11 4166 8000
Fax: +55 11 4166 8736

<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 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.

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 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 08/08/2010 01:27:57 PM and supersedes all previous versions.