# Elvaloy® AC resins Product Data Sheet

## Description

**Product Description**

Elvaloy® AC 1913 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**

- 13% By Weight Methyl Acrylate comonomer content

## Typical Properties

### Physical

<table>
<thead>
<tr>
<th>Property</th>
<th>Nominal Values</th>
<th>Test Method(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Density (g/cm³)</td>
<td>0.93</td>
<td>ASTM D792</td>
</tr>
<tr>
<td>Melt Flow Rate (190°C/2.16kg)</td>
<td>9 g/10 min</td>
<td>ASTM D1238 ISO 1183</td>
</tr>
</tbody>
</table>

### Thermal

<table>
<thead>
<tr>
<th>Property</th>
<th>Nominal Values</th>
<th>Test Method(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Melting Point (DSC)</td>
<td>98°C (208°F)</td>
<td>ASTM D3418 ISO 3146</td>
</tr>
<tr>
<td>Vicat Softening Point ()</td>
<td>60°C (140°F)</td>
<td>ASTM D1525 ISO 306</td>
</tr>
</tbody>
</table>

## Processing Information

### General

- **Maximum Processing Temperature** 310°C (590°F)

**General Processing Information**

Elvaloy® AC 1913 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 1913 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

<table>
<thead>
<tr>
<th>Extrusion Coating / Lamination Processing</th>
<th>Nominal Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>Feed Zone</td>
<td>185°C (365°F)</td>
</tr>
<tr>
<td>Second Zone</td>
<td>235°C (455°F)</td>
</tr>
</tbody>
</table>

A suggested extrusion set temperature profile
<table>
<thead>
<tr>
<th>Zone</th>
<th>Temperature</th>
</tr>
</thead>
<tbody>
<tr>
<td>Third Zone</td>
<td>260°C (500°F)</td>
</tr>
<tr>
<td>Fourth Zone</td>
<td>285°C (545°F)</td>
</tr>
<tr>
<td>Fifth Zone</td>
<td>285°C (545°F)</td>
</tr>
<tr>
<td>Adapter Zone</td>
<td>285°C (545°F)</td>
</tr>
<tr>
<td>Die Zone</td>
<td>285°C (545°F)</td>
</tr>
</tbody>
</table>

**FDA Status Information**

ELVALOY® AC 1913 Acrylate Copolymer Resin complies with Food and Drug Administration Regulation 21 CFR 177.1340(a) -- Ethylene-methyl acrylate copolymer resins, subject to the limitations and requirements therein. This Regulation describes polymers that may be used in contact with food, subject to the finished food-contact article meeting the extractive limitations under the intended conditions of use, as shown in paragraph (b) of the Regulation.

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

**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

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DuPont Company  
Chestnut Run Plaza – Bldg. 730  
974 Centre Road  
Wilmington, Delaware  
19805 U.S.A.  
Toll-Free (USA): 1-800-628-6208  
Telephone: 1-302-774-1000  
Fax: 1-302-355-4013

**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

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
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