

## Technical Information

# ELVALOY™ AC 3427

## Acrylate Copolymer

Description			
Product Description	ELVALOY™ AC 3427 is a copolymer of ethylene and butyl 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	27% By Weight Butyl Acrylate comonomer content		
Typical Properties			
Physical	Nominal Values		Test Method(s)
*Density ( )	0.926 g/cm <sup>3</sup>	ASTM D792	ISO 1183
*Melt Flow Rate ( 190°C/2.16kg)	4 g/10 min	ASTM D1238	ISO 1133
Thermal	Nominal Values		Test Method(s)
*Melting Point ( DSC)	94 °C ( 201.2 °F )	ASTM D3418	ISO 3146
Vicat Softening Point ( )	45 °C ( 113 °F )	ASTM D1525	ISO 306
Processing Information			
*Maximum Processing Temperature	310 °C ( 590 °F )		
General Processing Information	ELVALOY™ AC 3427 is normally processed at melt temperatures ranging from 160°C - 285°C (320°F - 545°F) in blown film or cast film equipment. A typical blown film 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 3427 can also be used in cast extrusions and coextrusions. It is easily processed on standard equipment used for low density polyethylene.		
Blown Film Processing	Nominal Values		
Processing Information	A suggested extrusion set temperature profile is shown below.		
Feed Zone	135 °C ( 275 °F )		
Second Zone	160 °C ( 320 °F )		
Third Zone	185 °C ( 365 °F )		
Fourth Zone	185 °C ( 365 °F )		
Fifth Zone	185 °C ( 365 °F )		
Adapter Zone	185 °C ( 365 °F )		
Die Zone	185 °C ( 365 °F )		
Cast Film / Sheet Processing	Nominal Values		
Processing Information	A suggested extrusion set temperature profile is shown below.		
Feed Zone	160 °C ( 320 °F )		
Second Zone	210 °C ( 410 °F )		
Third Zone	235 °C ( 455 °F )		
Fourth Zone	235 °C ( 455 °F )		
Fifth Zone	235 °C ( 455 °F )		
Adapter Zone	235 °C ( 455 °F )		
Die Zone	235 °C ( 455 °F )		

#### FDA Status Information

ELVALOY™ AC 3427 Acrylate Copolymer Resin 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™ AC 3427 Acrylate Copolymer Resin complies with Food and Drug Administration Regulation 21 CFR 176.180 - - Components of paper and paperboard in contact with dry food, subject to the limitations and requirements therein. This Regulation describes substances that may be used as components of the uncoated and coated food-contact surface of paper and paperboard in contact with dry food (Food Type VIII, identified in 21 CFR 176.170(c), Table 1).

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#### Regulatory Information

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

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- use in cardiac prosthetic devices regardless of the length of time involved (“cardiac prosthetic devices” include, but are not limited to, pacemaker leads and devices, artificial hearts, heart valves, intra-aortic balloons and control systems, and ventricular bypass-assisted devices);
- use as a critical component in medical devices that support or sustain human life; or
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