

Technical Data Sheet

ELITE™ AT 6507 Enhanced Polyethylene Resin

Overview

ELITE™ AT 6507 Enhanced Polyethylene Resin is a copolymer produced via INSITE™ technology from Dow. It is designed for stretch hooder application and offers a unique combination of holding force, elastic recovery, optics and toughness.

Sustainability Attribute:



Main Characteristics:

- Excellent elastic recovery and holding force
- Very high impact resistance and tear properties
- Ease of processing

Complies with:

- U.S. FDA FCN 424
- EU, 10/2011

Consult the regulations for complete details.

Physical Properties

Physical	Nominal Value	Unit (English)	Nominal Value	Unit (SI)	Test Method ¹
Density	0.902	g/cm ³	0.902	g/cm ³	ASTM D792
Melt Index (190°C/2.16 kg)	0.85	g/10 min	0.85	g/10 min	ASTM D1238
Films					
Film Thickness — Tested	2	mil	50	μm	
Film Puncture Energy	30.1	in·lb	3.40	J	Dow Method
Film Puncture Force	10.1	lbf	45.0	N	Dow Method
Film Puncture Resistance	99.1	ft·lb/in³	8.20	J/cm ³	Dow Method
Film Toughness					ASTM D882
MD	581	ft·lb/in³	48.1	J/cm ³	
TD	483	ft·lb/in³	40.0	J/cm³	

^{1.} ASTM: American Society for Testing and Materials

These are typical properties only and are not to be construed as specifications. Users should confirm results by their own tests.

Physical Properties (Cont.)

Films	Nominal Value	Unit (English)	Nominal Value	Unit (SI)	Test Method
Tensile Strength					ASTM D882
MD: Yield	508	psi	3.50	MPa	
TD: Yield	696	psi	4.80	MPa	
MD: Break	3350	psi	23.1	MPa	
TD: Break	2710	psi	18.7	MPa	
Tensile Elongation					ASTM D882
MD: Break	480	%	480	%	
TD: Break	530	%	530	%	
Dart Drop Impact	1800	g	1800	g	ASTM D1709B
Elmendorf Tear Strength ²					ASTM D1922
MD	640	g	640	g	
TD	320	g	320	g	
Optical					
Gloss (45°)	79		79		ASTM D2457
Haze	3.00	%	3.00	%	ASTM D1003

Extrusion Notes

Fabrication Conditions for Blown Film:

Screw Size: 45 mm

• Die Gap: 1.5 mm

Melt Temperature: 244°C

Output: 6.6 kg/hr/mm of die circumference

Die Diameter: 150 mmBlow-Up Ratio: 2.5 to 1Screw Speed: 59 rpm

2. Method B

Product Stewardship

Dow has a fundamental concern for all who make, distribute, and use its products, and for the environment in which we live. This concern is the basis for our product stewardship philosophy by which we assess the safety, health, and environmental information on our products and then take appropriate steps to protect employee and public health and our environment. The success of our product stewardship program rests with each and every individual involved with Dow products — from the initial concept and research, to manufacture, use, sale, disposal, and recycle of each product.

Customer Notice

Dow strongly encourages its customers to review both their manufacturing processes and their applications of Dow products from the standpoint of human health and environmental quality to ensure that Dow products are not used in ways for which they are not intended or tested. Dow personnel are available to answer your questions and to provide reasonable technical support. Dow product literature, including safety data sheets, should be consulted prior to use of Dow products. Current safety data sheets are available from Dow.

Medical Applications Policy

Any and all medical application use of Dow materials, whether a device, a component, or any type of primary or secondary packaging of a medically related object or substance, needs to be reviewed and approved by Dow before any Dow material can be tested in such application.

Dow requests that customers considering use of Dow products in medical applications notify Dow so that appropriate assessments may be conducted. Dow does not endorse or claim suitability of its products for specific medical applications. It is the responsibility of the medical device or pharmaceutical manufacturer to determine that the Dow product is safe, lawful, and technically suitable for the intended use. DOW MAKES NO WARRANTIES, EXPRESS OR IMPLIED, CONCERNING THE SUITABILITY OF ANY DOW PRODUCT FOR USE IN MEDICAL APPLICATIONS.

For further information contact your Dow sales or technical representative to request a Medical Application Review Request Form.

Additional details of Dow's Medical Applications Policy are available at: https://www.dow.com/en-us/support/product-safety.html.

Tobacco and Marijuana Policy

Dow does not support or intend for its products to be used, directly or indirectly, in the production of tobacco, the manufacture of tobacco products, the manufacture and use of electronic cigarettes (including vaping devices), the production of marijuana, or the manufacture of marijuana products intended for human consumption, where the Dow product (or its residues) may be present in the finished product or be alleged to facilitate the delivery of nicotine, other tobacco components, marijuana, or marijuana components.

Harmful Applications Policy

Dow does not intend for its products to be used in applications specifically intended to harm humans.

dow.com

NOTICE: No freedom from infringement of any patent owned by Dow or others is to be inferred. Because use conditions and applicable laws may differ from one location to another and may change with time, Customer is responsible for determining whether products and the information in this document are appropriate for Customer's use and for ensuring that Customer's workplace and disposal practices are in compliance with applicable laws and other government enactments. The product shown in this literature may not be available for sale and/or available in all geographies where Dow is represented. The claims made may not have been approved for use in all countries. Dow assumes no obligation or liability for the information in this document. References to "Dow" or the "Company" mean the Dow legal entity selling the products to Customer unless otherwise expressly noted. NO WARRANTIES ARE GIVEN; ALL IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE ARE EXPRESSLY EXCLUDED.

NOTICE: If products are described as "experimental" or "developmental": (1) product specifications may not be fully determined; (2) analysis of hazards and caution in handling and use are required; (3) there is greater potential for Dow to change specifications and/or discontinue production; and (4) although Dow may from time to time provide samples of such products, Dow is not obligated to supply or otherwise commercialize such products for any use or application whatsoever.

NOTICE: This data is based on information Dow believes to be reliable, as demonstrated in controlled laboratory testing. They are offered in good faith, but without guarantee, as conditions and method of use of Dow products are beyond Dow's control. Dow recommends that the prospective user determine the suitability of these materials and suggestions before adopting them on a commercial scale.

To the best of our knowledge, the information contained herein is accurate and reliable as of the date of publication, however we do not assume any liability for the accuracy and completeness of such information.

For additional information, not covered by the content of this document, contact us via our website http://www.dow.com/products_services/.

This document is intended for use within Europe.

