

# ELITE 5400G

## Enhanced Polyethylene Resin

- For food and specialty packaging films
- Extremely high impact resistance and good tear properties
- Good optical properties
- Complies with U.S. FDA 21 CFR 177.1520 (c) 3.2a.  
Consult the regulations for complete details.

ELITE\* 5400G Enhanced Polyethylene Resin is a copolymer produced via INSITE\* Technology from Dow Plastics<sup>†</sup>. It offers a unique combination of low seal initiation, moderate stiffness and low blocking tendencies for good performance on automated packaging equipment.

Physical Properties	Test Method	Values <sup>(1)</sup> English (SI)
<b>Resin Properties</b>		
Melt Index, g/10 min	ASTM D 1238	1.0
Density, g/cc	ASTM D 792	0.9160
DSC Melting Point, °F (°C)	Dow Method	252 (123)
Vicat Softening Point, °F (°C)	ASTM D 1525	214 (101)
<b>Film Properties, 2.0 mil (51 µm)</b>		
Puncture Resistance, ft·lbf/in. <sup>3</sup> (J/cm <sup>3</sup> )	Dow Method	334 (28)
Energy, in.·lbf (J)		105 (12)
Force, lbf (N)		27 (120)
Dart Impact (Method B), g	ASTM D 1709	>850
Elmendorf Tear, g	MD	825
	CD	1014
Tensile Yield, psi (MPa)	MD	1424 (10)
	CD	1475 (10)
Ultimate Tensile, psi (MPa)	MD	8246 (57)
	CD	7664 (53)
Ultimate Elongation, %	MD	609
	CD	671
Tensile Modulus, 2% Secant, psi (MPa)	MD	24,054 (166)
	CD	27,733 (191)
Gloss, 45°	ASTM D 2457	70
Haze, %	ASTM D 1003	9.0
Seal Initiation Temperature <sup>(2)(3)</sup> , °F (°C)	Dow Method	210 (99)

### Fabrication Conditions For Blown Film:

- Screw Size: 2.5 in. (63.5 mm); 24:1 L/D
- Screw Type: Barrier screw
- Die Gap: 70 mil (1.8 mm)
- Melt Temperature: 450°F (232°C)
- Output: 6 lb/hr/in. of die circumference
- Die Diameter: 6 in.
- Blow-Up Ratio: 2.5:1
- Screw Speed: 70 rpm
- Frost Line Height: 25 in. (635 mm)

- (1) Typical values, not to be construed as specifications. Users should confirm results by their own tests.
- (2) Temperature at which 2 lb/in. (8.8 N/25.4 mm) heat seal strength is achieved.
- (3) J&B Automatic Heat Seal and Hot Tack Tester 0.5 S dwell, 40 psi bar pressure, Instron pull speed 10 in./min.

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-See "Handling Considerations" attached

<sup>†</sup>Dow Plastics, a business group of The Dow Chemical Company and its subsidiaries.

# Handling Considerations

Material Safety Data (MSD) sheets for the product are available from Dow Plastics, a business group of The Dow Chemical Company and its subsidiaries, to help customers further satisfy their own safe handling and disposal needs and those that may be required by OSHA. Material Safety Data sheets on Dow products are intended to provide customers with essential information on such topics as Health and Worker Safety, Combustibility, and Disposal Considerations. Such information should be requested from the supplier(s) of any product(s) prior to working with it. As various additives and processing aids used in fabrication have their own safe use profile, their possible influence on handling and disposal must be investigated separately. For "Regulated" uses, such as food contact, your Dow sales representative can obtain compliance letters for specific resins.

## Disposal

DO NOT DUMP INTO ANY SEWERS, ON THE GROUND, OR INTO ANY BODY OF WATER. All disposal methods must be in compliance with all Federal, State/provincial, and local laws and regulations. Waste characterizations and compliance with applicable laws are the responsibility solely of the waste generator.

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As a service to its customers, Dow can provide names of information resources to help identify waste management companies and other facilities which recycle, reprocess, or manage chemicals or plastics, and that manage used drums. For more details, contact The Dow Chemical Company Customer Information Center at 1-800-441-4369. In Mexico, call 95-800-441-4369.

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## Additional Information

For more information in the United States or Canada, call 1-800-441-4369. In Mexico, call 95-800-441-4369.

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**Dow Plastics**

*We don't succeed unless you do.*