



Technical Data Sheet

ELITE™ 5940ST (Pipe Coating) Enhanced Polyethylene Resin

Overview

ELITE™ 5940 ST Polyethylene Resin is a copolymer produced via INSITE™ Technology from Dow. It offers a unique combination of excellent stiffness/toughness balance, good tear strength, ESCR and an outstanding processability, allowing for the production of a variety of extruded articles at high output rates.

Sustainability Attribute:



Uses / Applications

Main Characteristics:

- Excellent stiffness/toughness balance
- Excellent processability and melt strength

Applications:

- Metal pipe coating
- Pipe applications

Complies with:

- EU, No 10/2011

Consult the regulation for complete details.

Additive

- Antiblock: No
- Slip: No
- Processing aid: No



Physical Properties

Physical	Nominal Value	Unit (English)	Nominal Value	Unit (SI)	Test Method ¹
Density ²	0.941	g/cm ³	0.941	g/cm ³	ISO 1183
Melt Index (190°C/2.16 kg)	0.80	g/10 min	0.80	g/10 min	ASTM D1238
Mechanical					
Tensile Stress					ISO 527-2
Yield	2810	psi	19.4	MPa	
Break	4060	psi	28.0	MPa	
Tensile Strain (Break)	> 500	%	> 500	%	ISO 527-2
Stress Crack Resistance — 10% Igepal (122°F (50°C))	> 3000	hr	> 3000	hr	ASTM D1693
Hardness					
Durometer Hardness					ASTM D2240
Shore D, Compression Molded	56		56		
Thermal					
Vicat Softening Temperature	252	°F	122	°C	ASTM D1525
Oxidation Induction Time — (Isotherm, 190°C)	> 18	min	> 18	min	ASTM D3895

1. ISO: International Standardization Organization
ASTM: American Society for Testing and Materials
2. Unannealed density, measured on melt-index strand, annealed for 30 minutes at 23°C and 50% humidity. Measured by immersion method (Archimedes)

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

