



DOW™ LLDPE GRSN-9820 NT 7

The Dow Chemical Company - Linear Low Density Polyethylene Resin

Tuesday, November 5, 2019

General Information

Product Description

- Granular form
- Carrier resin for masterbatch systems
- Complies with U.S. FDA 21 CFR 177.1520 (c)3.1a
- Complies with EU, No 10/2011
- Consult the regulations for complete details.

DOW GRSN-9820 NT 7 Linear Low Density Polyethylene (LLDPE) Resin is produced using UNIPOL™ PE Process Technology and is supplied in granular form. This resin is specifically designed as a carrier resin for color concentrates and other masterbatch systems. The fine particle size reduces the need for grinding, and the high surface area of granular resin allows for more uniform dispersion of concentrate in the final product. GRSN-9820 NT 7 is compatible with polyethylene and polypropylene resins and can be used in a wide variety of fabrication processes.

General

Material Status	• Commercial: Active		
Availability	• North America		
Additive	• Antiblock: No	• Processing Aid: No	• Slip: No
Agency Ratings	• EU No 10/2011	• FDA 21 CFR 177.1520(c) 3.1a	
Forms	• Granules		

ASTM & ISO Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	0.926		ASTM D792
Melt Mass-Flow Rate (190°C/2.16 kg)	20	g/10 min	ASTM D1238
Environmental Stress-Cracking Resistance (ESCR) 122°F, 100% Igepal, F50	20.0	hr	ASTM D1693
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength (Yield)	1700	psi	ASTM D638
Tensile Strength (Break)	1100	psi	ASTM D638
Tensile Elongation (Yield)	3.0	%	ASTM D638
Tensile Elongation (Break)	60	%	ASTM D638
Flexural Modulus - 2% Secant	56000	psi	ASTM D790B
Impact	Nominal Value	Unit	Test Method
Tensile Impact Strength ²	80.0	ft-lb/in ²	ASTM D1822
Hardness	Nominal Value	Unit	Test Method
Durometer Hardness (Shore D)	50		ASTM D2240
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (66 psi, Unannealed)	109	°F	ASTM D648
Brittleness Temperature	< -105	°F	ASTM D746
Vicat Softening Temperature	201	°F	ASTM D1525
Melting Temperature (DSC)	253	°F	Internal Method
Peak Crystallization Temperature (DSC)	226	°F	Internal Method

Additional Information

Plaque molded and tested in accordance with ASTM D4976.

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Notes

¹ Typical properties: these are not to be construed as specifications.

² Type S