ENGAGE™ HM 7280

Polyolefin Elastomer

The Dow Chemical Company

Message:

High elasticity with good elastic recovery
High melt strength
Good impact strength
Good flow characteristics
ENGAGE™ HM 7280 Polyolefin Elastomer Resin is produced via gas phase polymerization from Dow. This is an ethylene-butene copolymer exhibiting high flexibility and elasticity. It can be utilized in monolayer and coextruded films and in blends with other polyolefins to enhance melt strength and toughness of the structure.

General Information			
Forms	Pellets		
Physical	**Nominal Value**	**Unit**	**Test Method**
Specific Gravity	0.884	g/cm³	ASTM D792
Melt Mass-Flow Rate (MFR) (190°C/2.16 kg)	< 0.50	g/10 min	ASTM D1238
Mooney Viscosity (ML 1+4, 150°C)	42	MU	ASTM D1646
Total Crystallinity - %	24.7		Internal Method
Hardness	**Nominal Value**	**Unit**	**Test Method**
Durometer Hardness			ASTM D2240
1.00 mm, Extruded [1]	81		
Shore A, Compression Molded	84		
Shore D, Compression Molded	29		
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Modulus - 100% Secant [2] (Compression Molded)	4.50	MPa	ASTM D638
Tensile Strength [3] (Break, Compression Molded)	5.10	MPa	ASTM D638
Tensile Elongation [4] (Break, Compression Molded)	310	%	ASTM D638
Flexural Modulus			ASTM D790
1% Secant : Compression Molded	28.2	MPa	
2% Secant : Compression Molded	25.3	MPa	
Elastomers	**Nominal Value**	**Unit**	**Test Method**
Tensile Strength (Break, 1.00 mm)	21.7	MPa	ASTM D412
Tensile Elongation (Break, 1.00 mm)	640	%	ASTM D412
Tear Strength [5]			ASTM D624
1.00 mm [6]	55.0	kN/m	
-- [7]	46.9	kN/m	
Thermal	**Nominal Value**	**Unit**	**Test Method**
Glass Transition Temperature	-43.0	°C	Internal Method

Vicat Softening Temperature	60.0	°C	ASTM D1525
Melting Temperature (DSC) [8]	116	°C	Internal Method

NOTE	
1.	Extruded sheet at 40 mil (1.0 mm) thickness with no significant difference between machine and cross-directional properties.
2.	510 mm/min
3.	510 mm/min
4.	510 mm/min
5.	Die C
6.	Extruded sheet at 40 mil (1.0 mm) thickness with no significant difference between machine and cross-directional properties.
7.	Compression Molded
8.	10°C/min Dow Method, complete protocols and results available upon request.

Recommended distributors for this material

Susheng Import & Export Trading Co.,Ltd.

Tel: +86 21 5895 8519

Phone: +86 13424755533

Email: sales@su-jiao.com

No. 215, Lianhe North Road, Fengxian District, Shanghai, China

WECHAT