Technical Data Sheet

DOW™ DA61 HL Enhanced Polyolefin Resin

Description

DOW™ DA61 HL is a polyolefin resin intended for use in acoustic barrier applications requiring high filler loading and high melt elongation.

Benefits & Features

- High melt elongation
- Excellent web stability
- High filler loading capability

Typical Applications

- Acoustic barrier

Typical Component Properties

Physical	Nominal Value	Unit (English)	Nominal Value	Unit (SI)	Test Method[1]
Density	0.905	g/cm³	0.905	g/cm³	ASTM D792
Base Density[2]	0.905	g/cm³	0.905	g/cm³	Dow Method
Melt Index (190°C/2.16 kg)	0.80	g/10 min	0.80	g/10 min	ASTM D1238
Films					
Film Thickness - Tested	1	mil	25	µm	
Film Puncture Energy	50.0	in·lb	5.65	J	Dow Method
Film Puncture Force	13.0	lbf	57.8	N	Dow Method
Film Puncture Resistance	350	ft·lb/in³	29.0	J/cm³	Dow Method
Film Toughness					ASTM D882
MD	800	ft·lb/in³	66.2	J/cm³	
TD	850	ft·lb/in³	70.3	J/cm³	
Secant Modulus					ASTM D882
1% Secant, MD	12800	psi	88.3	MPa	
2% Secant, MD	12000	psi	82.7	MPa	
1% Secant, TD	13000	psi	89.6	MPa	
2% Secant, TD	12000	psi	82.7	MPa	
Tensile Strength					ASTM D882
MD : Yield	850	psi	5.86	MPa	
TD : Yield	800	psi	5.52	MPa	
MD : Break	6500	psi	44.8	MPa	
TD : Break	5500	psi	37.9	MPa	

Typical Component Properties (Cont.)

Films	Nominal Value	Unit (English)	Nominal Value	Unit (SI)	Test Method
Tensile Elongation					ASTM D882
MD : Break	390	%	390	%	
TD : Break	500	%	500	%	
Dart Drop Impact	800	g	800	g	ASTM D1709B
Elmendorf Tear Strength[3]					ASTM D1922
MD	200	g	200	g	
TD	360	g	360	g	
Thermal					
Vicat Softening Temperature	203	°F	95.0	°C	ASTM D1525
Melting Temperature (DSC)	214	°F	101	°C	Dow Method

3. Method B