



Developmental DE 3401.05 Elastomer

Overview

Developmental DE 3401.05 Elastomer is a resin with a medium melt flow rate suitable for a wide variety of applications and fabrication processes, including cast film, extrusion and injection molding. It is an excellent resin for stretch films and soft films and is an excellent choice for PP modification.

Main Characteristics:

- Excellent elasticity
- Excellent filler acceptance
- Good Processability

Applications:

- Cast film
- PP modification
- Blend component for thermoplastic elastomers

Complies with:

- U.S. FDA FCN 708
- U.S. FDA 21 CFR 175.105© (5)
- EU, No 10/2011

Consult regulations for complete details

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density	0.863 g/cm ³	0.863 g/cm ³	ASTM D792
Melt Mass-Flow Rate (230°C/2.16 kg)	8.0 g/10 min	8.0 g/10 min	ASTM D1238
Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Modulus - 100% Secant ¹	624 psi	4.30 MPa	ASTM D2240
Tensile Strength ^{1, 2}			ASTM D638
Yield, Compression Molded	348 psi	2.40 MPa	
Break, Compression Molded	469 psi	3.23 MPa	
Tensile Elongation ^{1, 2}			ASTM D638
Break, Compression Molded	12 %	12 %	
Flexural Modulus ^{1, 3}	4060 psi	28.0 MPa	ASTM D790
Hardness	Nominal Value (English)	Nominal Value (SI)	Test Method
Durometer Hardness ²			ASTM D2240
Shore A, Compression Molded	80	80	
Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Vicat Softening Temperature	109 °F	43.0 °C	ASTM D1525
Optical	Nominal Value (English)	Nominal Value (SI)	Test Method
Gloss (45°, 78.7 mil (2000 µm))	71	71	ASTM D2457
Haze (78.7 mil (2000 µm), Injection Molded)	3.1 %	3.1 %	ASTM D1003

Additional Information

NOTICE: If products are described as "experimental" or "developmental" (1) product specifications may not be fully determined; (2) analysis of hazards and caution in handling and use are required; and (3) there is greater potential for Dow to change specifications and/or discontinue production.

Notes

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

¹ 2.0 in/min (50 mm/min)

² Aged two weeks (±3 days) prior to testing.

³ Measured in injection molded samples, aged two weeks (+ 3 days) prior to testing.

