Formolene® 4101O

Formosa Plastics Corporation, U.S.A. - Polypropylene Homopolymer

Tuesday, November 5, 2019

General Information

Product Description

Formolene® 4101O is a low viscosity, highly isotactic, polypropylene homopolymer designed primarily for multifilament and bulk continuous filament fiber. It contains a unique combination of stabilizers, which give it excellent gas fading resistance and appropriate process stability.

Formolene® 4101O meets the requirements of the U.S. Food and Drug Administration as specified in 21 CFR 177.1520, covering safe use of polyolefin articles and components of articles intended for direct food contact.

This material is free of animal-derived content.

General			
Material Status	• Commercial: Active		
Availability	• North America		
Additive	• Unspecified Stabilizer		
Features	• Food Contact Acceptable • Gas-fading Resistant • Good Processing Stability	• High Isotactic • Homopolymer • Low Viscosity	• No Animal Derived Components
Uses	• BCF Multifilaments	• Fibers	• Filaments
Agency Ratings	• EC 1907/2006 (REACH)		
Forms	• Pellets		
Processing Method	• Filament Extrusion	• Filament Winding	

ASTM & ISO Properties [1]

Physical	Nominal Value	Unit	Test Method
Density	0.900	g/cm³	ASTM D1505
Melt Mass-Flow Rate (230°C/2.16 kg)	20	g/10 min	ASTM D1238
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Strength [2] (Yield, Injection Molded)	5370	psi	ASTM D638
Tensile Elongation [2] (Yield, Injection Molded)	8.0	%	ASTM D638
Flexural Modulus - 1% Secant [3] (Injection Molded)	220000	psi	ASTM D790
Impact	**Nominal Value**	**Unit**	**Test Method**
Notched Izod Impact (73°F, Injection Molded)	0.39	ft·lb/in	ASTM D256A
Hardness	**Nominal Value**	**Unit**	**Test Method**
Rockwell Hardness (R-Scale, Injection Molded)	105		ASTM D785

Notes

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

[2] 2.0 in/min

[3] 0.051 in/min