



Formolene® 5144L

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

Tuesday, November 5, 2019

General Information

Product Description

Formolene® 5144L is a highly isotactic, nucleated polypropylene homopolymer designed for consumer products and appliance applications that require high stiffness and long-term exposure to elevated temperatures. It has found success in home laundry and dishwasher applications.

Formolene® 5144L has earned a UL continuous service rating of 115 °C.

This material is free of animal-derived content.

General

Material Status	• Commercial: Active		
Availability	• North America		
Additive	• Nucleating Agent		
Features	• Food Contact Acceptable • Good Thermal Stability • High Heat Resistance	• High Isotactic • High Stiffness • Homopolymer	• No Animal Derived Components • Nucleated
Uses	• Appliances	• Consumer Applications	
Agency Ratings	• EC 1907/2006 (REACH)	• FDA 21 CFR 177.1520	
Forms	• Pellets		
Processing Method	• Injection Molding		

ASTM & ISO Properties ¹

Physical	Nominal Value	Unit	Test Method
Density	0.900	g/cm ³	ASTM D1505
Melt Mass-Flow Rate (230°C/2.16 kg)	5.0	g/10 min	ASTM D1238
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength ² (Yield, Injection Molded)	5800	psi	ASTM D638
Tensile Elongation ² (Yield, Injection Molded)	5.5	%	ASTM D638
Flexural Modulus - 1% Secant ³ (Injection Molded)	290000	psi	ASTM D790
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact (73°F, Injection Molded)	0.50	ft-lb/in	ASTM D256A
Hardness	Nominal Value	Unit	Test Method
Rockwell Hardness (R-Scale, Injection Molded)	115		ASTM D785
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load 66 psi, Unannealed, Injection Molded	257	°F	ASTM D648
Deflection Temperature Under Load 264 psi, Annealed, Injection Molded	151	°F	ASTM D648

Notes

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

² 2.0 in/min

³ 0.051 in/min