Formolene® 5140H

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

Tuesday, November 5, 2019

General Information

Product Description

Formolene® 5140H is a polypropylene homopolymer with fast cycle time and easy mold release. It is designed for compression molded caps and closure applications. It contains a unique combination of stabilizers, nucleators and antistats that provide an excellent balance of stiffness and impact strength.

Formolene® 5140 H offers advantages in both processing and physical properties over current polypropylenes used for compression molded caps and closures.

Formolene® 5140H 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	• Antistatic	• Nucleating Agent	
Features	• Antistatic • Fast Molding Cycle • Food Contact Acceptable	• Good Impact Resistance • Good Stiffness • Homopolymer	• No Animal Derived Components • Nucleated
Uses	• Caps	• Closures	
Agency Ratings	• EC 1907/2006 (REACH)	• FDA 21 CFR 177.1520	
Forms	• Pellets		
Processing Method	• Compression Molding		

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)	2.1	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)	5.0	%	ASTM D638
Flexural Modulus - 1% Secant [3] (Injection Molded)	245000	psi	ASTM D790
Impact	**Nominal Value**	**Unit**	**Test Method**
Notched Izod Impact (73°F, Injection Molded)	0.70	ft·lb/in	ASTM D256A
Hardness	**Nominal Value**	**Unit**	**Test Method**
Rockwell Hardness (R-Scale, Injection Molded)	114		ASTM D785
Thermal	**Nominal Value**	**Unit**	**Test Method**
Deflection Temperature Under Load			ASTM D648
66 psi, Unannealed, Injection Molded	243	°F	

Notes

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

[2] 2.0 in/min

[3] 0.051 in/min