Formolene® 5181K

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

Tuesday, November 5, 2019

General Information

Product Description

Formolene® 5181K is a high molecular weight, highly isotactic, polypropylene homopolymer containing anti-stat designed for straws and cutlery. It contains a unique combination of stabilizers, which give it process stability and good end use performance.

Formolene® 5181K 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	• Unspecified Stabilizer	
Features	• Antistatic • Food Contact Acceptable • Good Processing Stability	• High Isotactic • High Molecular Weight • Homopolymer	• No Animal Derived Components
Uses	• Drinking Straws	• Table Products	
Agency Ratings	• EC 1907/2006 (REACH)	• FDA 21 CFR 177.1520	
Forms	• Pellets		
Processing Method	• Extrusion		

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)	5.0	g/10 min	ASTM D1238
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Strength [2] (Yield, Injection Molded)	5220	psi	ASTM D638
Tensile Elongation [2] (Yield, Injection Molded)	9.0	%	ASTM D638
Flexural Modulus - 1% Secant [3] (Injection Molded)	200000	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)	110		ASTM D785

Notes

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

[2] 2.0 in/min

[3] 0.051 in/min