Formolene® 5143N

Tuesday, November 5, 2019

Formosa Plastics Corporation, U.S.A. - Polypropylene Random Copolymer

General Information

Product Description

Formolene® 5143N is a polypropylene homopolymer designed for sheet and thermoforming applications requiring good clarity. It contains a unique combination of stabilizers and nucleation that give it an excellent balance of stiffness and impact strength. Formolene® 5143H offers advantages in processing over other polypropylenes used for thermoforming, including a broad forming window and a higher melt flow.

Formolene® 5143N 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	• Nucleating Agent	• Unspecified Stabilizer	
Features	• Food Contact Acceptable • Good Clarity • Good Impact Resistance	• Good Stiffness • Homopolymer • No Animal Derived Components	• Nucleated
Uses	• Sheet	• Thermoforming Applications	
Agency Ratings	• EC 1907/2006 (REACH)	• FDA 21 CFR 177.1520	
Appearance	• Clear/Transparent		
Forms	• Pellets		
Processing Method	• Sheet Extrusion	• Thermoforming	

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)	3.2	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)	6.0	%	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)	0.69	ft·lb/in	ASTM D256A
Thermal	**Nominal Value**	**Unit**	**Test Method**
Deflection Temperature Under Load			ASTM D648
66 psi, Unannealed, Injection Molded	241	°F	

Notes

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

[2] 2.0 in/min

[3] 0.051 in/min