

Formolene® HB4903

Formosa Plastics Corporation, U.S.A. - High Density Polyethylene

Tuesday, November 5, 2019

General Information

Product Description

Formolene® HB4903 is a high performance copolymer that is designed for the most demanding blow molding applications. It is also utilized in many sheeting applications. This resin has exceptional stress crack resistance, excellent surface appearance, good melt strength, and good processability.

Formolene® HB4903 meets all the requirements of the U.S. Food and Drug Administration as specified in 21 CFR 177.1520 for food packaging at temperatures not exceeding 212°F (100°C).

General	·		
Material Status	Commercial: Active		
Availability	North America		
Features	CopolymerFood Contact AcceptableGood Melt Strength	 Good Processability Hexene Comonomer High ESCR (Stress Crack Resist.) 	Pleasing Surface Appearance
Uses	Blow Molding ApplicationsFood PackagingFuel Tanks	Industrial ContainersSeatsSheet	Waste Containers
Agency Ratings	• EC 1907/2006 (REACH)	• FDA 21 CFR 177.1520 ¹	
Processing Method	Blow Molding		

ASTM & ISO Properties ²				
Physical	Nominal Value	Unit	Test Method	
Density	0.949	g/cm³	ASTM D1505	
Melt Mass-Flow Rate (190°C/2.16 kg)	0.30	g/10 min	ASTM D1238	
Environmental Stress-Cracking Resistance (ESCR)			ASTM D1693B	
10% Igepal, Compression Molded, F50	500	hr		
Mechanical	Nominal Value	Unit	Test Method	
Tensile Strength ³ (Yield, Compression Molded)	3630	psi	ASTM D638	
Tensile Elongation ³ (Break, Compression Molded)	> 600	%	ASTM D638	
Thermal	Nominal Value	Unit	Test Method	
Brittleness Temperature	< -180	°F	ASTM D746	

Notes



¹ temperatures not exceeding 212°F (100°C)

² Typical properties: these are not to be construed as specifications.

³ Type IV, 2.0 in/min