

# 50100

# Polyethylene Product

# **Product Description**

**50100** is a polyethylene product suitable for blow molding. This material is polymerized with a chromium catalyst and it is designed for large blow molded parts that require melt strength, rigidity, ESCR. It is used for Shipping containers, Jerricans, Agricultural chemical tanks.

#### **Product Characteristic**

Test Method Used ASTM

FeaturesMelt strengthRigidityTypical Customer ApplicationsJerricanContainers

# **Typical Properties**

Physical		Test Method	Unit	Value
	Melt Flow Rate (21.6 kg @190°C)	ASTM D1238	g/10min	9.75
	Density	ASTM D1505	g/cm³	0.948
Mechanical		Test Method	Unit	Value
	Tensile strength @ Yield	ASTM D638	MPa	25
	Tensile Elongation @ 23°C	ASTM D638	%	600
	Flexural Modulus(13mm/min)	ASTM D790	MPa	1200
	ESCR (Condition B, 100% Igepal, F50)	ASTM D1693	hr	1000
	Brittleness Temperature	ASTM D746	℃	<-75
	Shore D	ASTM D2240	-	68
Thermal		Test Method	Unit	Value
	Vicat	ASTM D1525	°C	126

Notes: Results may vary depending on environmental conditions and /or devices.

## **Processing Recommendation**

The actual conditions depends on the type of equipment used.

## **Blow Molding**

**50100** is easy to process with standard Blow molding machines. Following molding parameters should be used as guidelines:

Blow Molding Temperature  $190 - 230 \, ^{\circ}\text{C}$  Extrusion Melt Temperature  $190 - 230 \, ^{\circ}\text{C}$ 

## Storage

This material should be stored in dry conditions, protected from sunlight and at temperatures below 50 °C.

#### Contact

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