

PS rolls

Caroform PS Pharma 5180

Product Datasheet

Version 6

05/11/2019

Description

Caroform High Impact Polystyrene (HIPS) is a general-purpose opaque material that has a good balance of stiffness and toughness. It has good impact strength and is an excellent all-purpose material. It is very easy to thermoform. The Caroform S Pharma 5180 has been developed specifically for pharmaceutical packaging needs. It offers all traceability, production in a clean environment and specific packaging to protect the product from dust.

Applications

Pharmaceutical packaging

Key Features

Certification/Approvals

The following approvals are available
 ISO 9001:2015 and BRC IoP standards
 Food: 10/2011/EC
 RoHS: European Regulation 2015/863/EC
 USP CLASS VI <87>

Printing

It is not designed for printing. Please contact our sales department if printing is required.

Thermoforming

Excellent thermoforming ability.

Conversion

Gluing can be done with either hot-melt or solvent-based glue.

Product Availability

Colour

White or customer match.

Finish

Natural matt.

Thickness

0.2 mm to 1.5 mm

Roll Size Specifications

Gauge	Width	
	Minimum	Maximum
0,2 mm 0.49	300 mm	740 mm
0,5 mm to 1.5 mm	300 mm	780 mm

Physical properties

Properties	Unit	Standard	Method	Value
Density [#]	g/cm ³	ISO 1183	-	1.06
Tensile Strength	MPa	ISO 527	50 mm/min	25
Elongation at Break	%	ISO 527	50 mm/min	50
Tensile Modulus	MPa	ISO 527	50 mm/min	1800
Flexural Strength	MPa	ISO 178	2 mm/min	42
Charpy Notched Impact Strength	kJ/m ²	ISO 179	1eA at 23°C	10
Vicat Softening Point	°C	ISO 306	B50/oil	90
Heat Distortion Temperature	°C	ISO 75	HDT/A 1.8MPa	82

[#]The density quoted should only be used as a guide. This value can change depending upon the type and quantity of pigments or additives used.

Available Options

Offline cutting available up to 0,6 mm :
 100 mm width mini

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Additional Information

Thermoforming

Very easy to thermoform. Typical forming temperatures are between 150 °C to 180 °C. Normally no predrying is required if the material is kept in dry conditions.

UV Resistance

In outdoor or strong UV light conditions, HIPS will discolour and become brittle in a matter of months. For UV resistance grades please refer to the relevant technical data sheet or contact the Sales Office.

Cleaning and Maintenance

Typical detergents and soaps dissolved in warm water can be used to effectively clean surface contamination from the surface.

Chemical Resistance

Chemical resistance is influenced by many factors, including concentration, temperature, exposure time and material stress. Therefore the data below should only be used as a guide.

Reagent	Chemical resistance	Reagent	Chemical resistance
Acetone	Poor	Chloroform	Poor
Acid – (Weak)	Very Good	Citric Acid Solution	Good
Acid – (Strong)	Poor	Common Salt	Excellent
Apple Juice	Very Good	Detergents	Good
Beef Fat	Very Good	Diary Products	Good
Butter	Good	Diesel	Poor
Base (Weak)	Excellent	Ethyl Alcohol	Good
Base (Strong)	Poor	Fertilisers	Good
Carrot Juice	Excellent	Petrol	Poor

Manufacturing Tolerances

The tolerances below should only be used as a general guide, as embossing and temperature can have an influence.

SHEET GAUGE	Up to 0.6 mm	0.61 to 1.5 mm
GAUGE	± 10%	± 6 %
WIDTH	± 3 mm	± 3 mm

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