









Kormax HDPE

Kormax Material Document

Kormax HDPE [High-Density Polyethylene] has excellent chemical resistance, low moisture absorption and good impact resistance. Kormax HDPE is able to be welded, heat formed and machined using metal and wood working equipment. It is priced lower in comparison to other plastic materials. Being a polyethylene material it floats in water, is able to be used in cold temperatures and in food processing equipment / materials handling applications.

	Max Continuous Operating Temperature	80°C		Density	0.95
	Tensile Strength	4.5 MPa		Outside in Sunlight	Yes
	Suitability for Food Contact	Yes		Moisture Absorption	0.0%
	Coefficient of Friction to Steel	Low		Machinability	Moderate

Physical Properties

	Test Method	Unit	Value
Water absorption	ISO 62	%	<0.01
Density	ISO 1183	g/cm ³	0.95
Maximum permissible service temp.	-	°C	80
Lower permissible service temp.	-	°C	-50

Mechanical Properties

	Test Method	Unit	Value
Yield Stress	ISO 527	N/mm ²	≥ 22
Elongation at yield	ISO 527	%	≥ 8
Modulus of elasticity	ISO 527	MPa	1100
Impact Strength (Charpy)	ISO 179	kJ/m ²	Without breakage
Notched impact strength (Charpy)	ISO 11542-2	kJ/m ²	16
Ball indentation	ISO 2039-1	N/mm ²	43
Shore-D	ISO 868	-	65

Thermal Properties

	Test Method	Unit	Value
Melting Range DSC, 10K/min.	ISO 3146	°C	130-135
Thermal Conductivity	ISO 5261`2	W/(m*K)	0.4