PETRODUCT
Petrochemical trading Co.

Product Data Sheet

LIM 1922

Low Density Polyethylene

Product Description

LIM 1922 is a low-density polyethylene, offering a unique combination of consistent process-ability, flexibility and toughness. This grade developed for application that require a good balance between flow properties and mechanical properties. LIM 1922 has been manufactured under SABTEC licensed technology.

General Information

Status	Commercial: Active		
Application	Injection molded articles (toys, household articles, caps, lids, etc.)- Base resin for master- batches		
Form(s)	Pellet		
Attribute	Good toughness- Easy process ability- Producing flexible injection molded articles.		
Additives	Antioxidant: Yes	Antiblock : No	Slip Agent : No

Typical Properties	Typical Value [1]	Unit	Test Method
Physical			
High Load Melt Flow Index (190 °C/ 2.16 kg)	22	dg/min	ISO 1133
Density [2]	919	kg/m^3	ISO 1183 (A)
Mechanical [3]			
Stress at Yield	8	MPa	ISO 527-1,2
Stress at Break	7	MPa	ISO 527-1,2
Strain at Break	400	%	ISO 527-1,2
Tensile Modulus	175	MPa	ISO 527-1,2
Creep Modulus (After 1 hour)	80	MPa	ISO 899
Creep Modulus (After 1000 hour)	45	MPa	ISO 899
Notched Izod at +23°C	42	kJ/m^2	ISO 180 A
Notched Izod at -30 °C	5	kJ/m^2	ISO 180 A
Tensile-Impact strength (Notched, Type 1, Method 1B, -30°C)	86	kJ/m^2	ISO 8256/1B

Hardness Shore D	45	-	ISO 868
Ball Indentation Hardness	16	MPa	ISO 2039-1
ESCR	3	hr.	SABTEC Method
Thermal [3]			
Deflection Temperature Under Load (0.45 MPa)	39	°C	ISO 75
Vicat Softening Temperature (Method A/10N)	82	°C	ISO 306
Melting Temperature	105	°C	ISO 3146
Melting Enthalpy	104	J/g	ISO 3146

Recommended Process Conditions [5]

Extruder temperature profile: 180-210 °C Mold temperature: 20-40 °C

1. Typical values: these are not to be construed as specifications.
2. The density parameter was determined on compression-molded specimens, which were prepared in accordance with procedure C of ASTM D4703, Annex A1.
3. Properties are based on compression-molded specimens, which were prepared in accordance with procedure B of ASTM D4703, Annex A1, using 100% LIM1922 resin.
4. Please note that, these processing conditions are recommended by producer only for 100 LIM1922 resin (not in the case of blending with any other compatible material), but because of the many particular factors which are outside our knowledge and control, and may affect the use of product, no warranty is given.