

HB0035

1) Product Description:

HB0035 is a high molecular weight high density polyethylene blow moulding grade combining blow moulding extrusion behavior and superior mechanical properties. Blow moulded items made from HB 0035 exhibit high impact strength and good stress cracking resistance and high stiffness . HB 0035 contains antioxidant to protect the polymer from degradation during processing . HB 0035 is a highly crystalline , non-polar thermoplastic and has excellent chemical resistance and superb impact resistance at ambient conditions and even at cold temperatures.

2) Applications:

- Small blow moulding
- Bottles
- Containers (up to 5 lit)

3) Typical data

PROPERTY	TEST METHOD	UNIT	TYPICAL VALUE*
Mass density (23oC)	ASTM D 1505	g/cm ³	0.959
Melt Flow Rate (190oC/2.16 kg)	ASTM D1238	g/10min	0.35
Izod impact strength	ASTM D 256	Kg.cm/cm	25 min
Yellow index	ASTM D 1925	-	-5 max.
Ash content	ASTM D 1063	wt%	0.06 max
Volatile matter	ASTM D 1960	wt%	0.05 max.
Tensile strength @ break	ASTM D 638	gr/cm ²	290 min
Elongation @ break	ASTM D 638	%	900 min
Melting point	ASTM D 2117	oC	130
Vicat softening point	ASTM D 1525	oC	126
ESCR	ASTM D 1693	hr	15

4) Process conditions:

HB0035 can be processed in most types of blow moulding equipment including HDPE or LDPE extruders . It is suitable for producing hollow article in extrusion blow moulding process . A single screw extruder with a barrel of 25D to 30D long , smooth walled grooved feed section and/ or with decompression , mixing and shearing sections with 20D to 25Dscrew length are typical extruders for blow moulding of containers . This arrangement minimizes thermal degradation of melt and provides a high plasticizing capacity coupled with good extrudate quality.

