



# HB0035

## HIGH DENSITY POLYETHYLENE

### General Informations:

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.

### Applications:

HB0035 is well suited for wide range of blow moulding applications due to its unique properties. These range from bottles for bleach, motor oil, toiletries, mild and distilled water. This grade is also used to make small containers (from 10 cc to 20 lit.).

### Specifications:

Property	Unit	Value	Test Method
MFI (190 °C /2. 16 kg)	gr/10min.	0.35	ASTM D 1238
Density	gr/cm <sup>3</sup>	0.959	ASTM D 1505
Izod impact strength	Kg.cm/cm	25 min	ASTM D 256
Yellow index	--	-5 max.	ASTM D 1925
Ash content	wt%	0.06 max	ASTM D 1063
Volatile matter	wt%	0.05 max.	ASTM D 1960
Tensile strength @ break	gr/cm <sup>2</sup>	290 min	ASTM D 638
Elongation @ break	%	900 min	ASTM D 638
Melting point	°C	130	ASTM D 2117
Vicat softening point	°C	126	ASTM D 1525
ESCR	hr	15	ASTM D 1693

The above data are typical laboratory average. They are intended to serve as guides only.

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### **Processing 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 25D screw 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.

### **Storage:**

The product should be stored in dry conditions at temperature below 60°C and protected from UV light.

Improper storage can initiate degradation with resulting odor generation and colour changes.

### **Health & Environment:**

HB0035 is not classified as a dangerous product. Dust and fines from the product may give a risk for dust explosion. All equipment should be properly grounded. Inhalation of dust may irritate the respiratory system and should be avoided.

During processing of the product small amounts of fumes are generated which require proper ventilation.

### **Recycling:**

End products made from this polymer are recyclable for other applications, using modern methods of shredding and cleaning, only if approved in the relevant standard or specification. In-house production waste should be kept clean to facilitate direct recycling.

Dumping and landfilling is also possible in agreement with the competent authorities.

### **Food Contact:**

The composition of products complies with the EC Directive 90/128/EEC for use in food contact application.

### **Packaging:**

This product is packed in 25 Kg PE bags.