



54GC016

HIGH DENSITY POLYETHYLENE CAPS & CLOSURE GRADE

54GC016 is a bimodal High-Density Polyethylene grade suitable for injection and extrusion-compression molded Caps & Closures. This grade offers excellent process ability & organoleptic properties, very good balance of stiffness & toughness along with ESCR.

Typical Characteristics*			
Property	Test Method	Unit	Typical Value**
Melt Flow Index (190°C/2.16 kg)	ASTM D1238	gm/10 min	1.6
Density (23°C)	ASTM D1505	gm/cm ³	0.954
Tensile Strength at Yield	ASTM D638	MPa	27
Elongation at Yield	ASTM D638	%	9
Elongation at Break	ASTM D638	%	>900
Flexural Modulus	ASTM D790	MPa	1250
Hardness	ASTM D2240	Shore D	62
Vicat Softening Point	ASTM D1525	°C	126

*Typical Characteristics and not to be taken as specifications

**Mechanical Properties are on Compression molded specimen

Applications:

Caps & Closures for Beverage, Food & Industrial Packaging, Shoulder for Collapsible Tubes/ Lamitubes.

Regulatory Information

- This grade meets the requirements stipulated in IS 7328:2020, "Specification For Polyethylene Material For Moulding And Extrusion" and it's subsequent amendments, when the products are used in contact with foodstuffs, pharmaceuticals and drinking water. It also conforms to IS 16738:2018 "Positive List of Constituents for Polypropylene, Polyethylene and their Copolymers for its Safe Use in Contact with Foodstuffs and Pharmaceuticals"
- The grade and the additives incorporated in it also comply with the FDA: CFR Title 21,177.1520, Olefin polymers.
- BIS Designation Code : IS 7328-3B-CB-FDB.
- Not to be used in the manufacture of Single Use Plastic (SUP) items prohibited under PWM Rules, 2016.

Storage Recommendations

- Bags should be stored in dry/closed conditions at temperatures below 50°C and protected from UV / direct sunlight.

Reliance Industries Limited