



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.

DISCLAIMER

The information contained herein may include typical properties and processing parameters of the grade or its typical performances when used in respective applications. The values given above are based on analysis of representative samples and not the actual product supplied. It is the customer's responsibility to inspect and test our grades in order to satisfy itself as to the suitability of the products for customers' particular application. The customer is solely responsible for all determinations regarding any use of material or product and any process in its area of interest. RIL assumes no obligation or liability for any loss, damage or injury directly or indirectly suffered or incurred as a result of using any of the information or product given in this document. The information and data presented herein is true and accurate to the best of our knowledge. No warranty or guarantee expressed or implied, is made regarding performance or otherwise. This information and data may not be considered as a suggestion to use our products without taking into account existing patents, or legal provisions or regulations, whether national or international. The user of any information and/or data is advised to obtain the latest details from any of the offices of the company or its authorized agents, as the information and/or data is subject to change based on the research and development work undertaken by the company.