



# S42005 POLYETHYLENE

## FOR WIRE & CABLE GRADE

S42005 is a natural polyethylene grade recommended as a base resin for sheathing/jacketing in jelly filled telecommunications cables.

It is designed to provide excellent processing characteristics and formulated to offer superior physical / electrical insulation properties including good environmental stress crack resistance.

Physical Characteristics*			
Property	Test Method	Unit	Typical Value**
Density (23°C)	ASTM D1505	g/cc	0.946
Melt Flow Index (190°C/2.16 kg)	ASTM D1238	g/10 min	0.55
Tensile Strength at Yield	ASTM D638	MPa	20.0
Elongation at Break	ASTM D638	%	500
Flexural Modulus	ASTM D790	MPa	600
ESCR, F <sub>50</sub>	ASTM D1693/B	hr	> 500
Softening Point	ASTM D1525	°C	118

\*Typical Characteristics and not to be taken as specifications

\*\*Mechanical Properties are on Injection Moulded Specimen

### Applications

Base resin - Sheathing/jacketing of PLF cables and jacketing of optical fibre cables.

### Regulatory Information

- Meets the requirements stipulated in standard IS: 10146-1982 on "Specification for Polyethylene for safe use in contact with foodstuffs, pharmaceuticals, and drinking water". It also conforms to the positive list of constituents as prescribed in IS: 10141-1982. The grade and the additives incorporated in it also comply with the FDA:CFR Title 21,177.1520, Olefin polymers.

### Storage Recommendations

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