ALCUDIA® HDPE C-240-UV

High Density Polyethylene

REPSOL

Message:

ALCUDIA® C-240-UV is a natural high molecular weight and high density polyethylene that gives to the compound the following features: excellent processability; high abrasion resistance; good mechanical properties; excellent environmental stress cracking resistance (ESCR) and superior compatibility with pigments. It contains an antioxidant system which warranties protection against thermal oxidation during processing and long term stability. TYPICAL APPLICATIONS

Colour Jacketing for power and telecommunication cables.

It is recommended an extrusion melt temperature of 220°C and a temperature profile between 190 - 235°C. Optimal processing conditions must be tuned for each production line.

ALCUDIA® C-240-UV meets the following specifications: ISO 1872 PE KHN 40D001/003; ASTM D 1248 II, A5, J5; UNESA 3305C.

| General Information | | | | | |
|-------------------------------------|--|----------|-------------|--|--|
| Additive | Antioxidation UV stabilizer | | | | |
| | | | | | |
| Features | High ESCR (Stress Cracking Resistance) | | | | |
| | High molecular weight | | | | |
| | Antioxidation | | | | |
| | Good UV resistance | | | | |
| | Workability, good | | | | |
| | Good coloring | | | | |
| | Good wear resistance | | | | |
| | Good weather resistance | | | | |
| | Excellent appearance | | | | |
| Uses | Cable sheath | | | | |
| | Wire and cable applications | | | | |
| Agency Ratings | ASTM D 1248, II, Class A, Cat. 5, Grade J5 | | | | |
| | ISO 1872 PE KHN 40D001 | | | | |
| | ISO 1872 PE KHN 40D003 | | | | |
| | UNESA 3305C | | | | |
| Appearance | Natural color | | | | |
| Forms | Particle | Particle | | | |
| Processing Method | Extrusion | | | | |
| Physical | Nominal Value | Unit | Test Method | | |
| Density | 0.938 | g/cm³ | ISO 1183 | | |
| Melt Mass-Flow Rate (MFR) (190° kg) | C/2.16 0.20 | g/10 min | ISO 1133 | | |

| Environmental Stress-Cracking Resistar | nce | | |
|--|---------------|------|-------------|
| (F50) | > 1000 | hr | ASTM D1693 |
| Carbon Black Content | 2.5 | % | ASTM D1603 |
| Retention of Mechanical Properties | | | |
| 110°C ¹ | > 75 | % | ISO 527-2 |
| 50% retention after aging | > 25.0 | day | |
| Oxygen sensing time (200°C) | > 40 | min | EN 728 |
| Hardness | Nominal Value | Unit | Test Method |
| Durometer Hardness (Shore D) | 60 | | ISO 868 |
| Mechanical | Nominal Value | Unit | Test Method |
| Tensile Stress (Break) | 28.0 | MPa | ISO 527-2 |
| Tensile Strain (Break) | 800 | % | ISO 527-2 |
| Thermal | Nominal Value | Unit | Test Method |
| Brittleness Temperature ² | -76.0 | °C | ASTM D746 |
| Vicat Softening Temperature | 126 | °C | ISO 306/A |
| Electrical | Nominal Value | | Test Method |
| Dielectric Constant (1 MHz) | 2.30 | | ASTM D150 |
| Dissipation Factor (1 MHz) | 4.0E-4 | | ASTM D150 |
| NOTE | | | |
| 1. | 14 days | | |
| 2. | 0 Failures | | |

The information and data on this page are provided by manufacturers and document providers. SHANGHAI SUSHENG assumes no legal liability. It is strongly recommended to verify all technical data with material suppliers before final material selection. All rights belong to the original authors. If any infringement occurs, please contact us immediately.

Recommended distributors for this material

Susheng Import & Export Trading Co.,Ltd.

Tel: +86 21 5895 8519

Phone: +86 13424755533 Email: sales@su-jiao.com

No. 215, Lianhe North Road, Fengxian District, Shanghai, China

