# ALCUDIA® LDPE 2202-CN

Low Density Polyethylene

REPSOL

## Message:

ALCUDIA® 2202-CN is a high molecular weight, low density polyethylene black compound which offers easy processing combined with good mechanical properties. It contains well dispersed carbon black and antioxidant in order to ensure UV radiation resistance and thermal ageing respectively. The outstanding features of this grade are its excellent processability, which makes suitable product for self-soported cable, and its good environmental stress cracking resistance (ESCR).

| General Information | |
|---|---|
| Additive | Antioxidation<br>Carbon black (3%) |
| Features | High ESCR (Stress Cracking Resistance)<br>High molecular weight<br>Antioxidation<br>Workability, good |
| Uses | Cable sheath<br>Wire and cable applications |
| Agency Ratings | ASTM D 1248, I, Class C, Cat. 5, Grade J3<br>ISO 1872 PE KHC 23D003<br>NF C 32-060 GE1<br>VDE 0207 Teil3 2YM2 |
| Appearance | Black |
| Forms | Particle |
| Processing Method | Wire & Cable Extrusion<br>Extrusion |

| Physical | Nominal Value | Unit | Test Method |
|---|---|---|---|
| Density (23°C) | 0.934 | g/cm³ | ISO 1183 |
| Melt Mass-Flow Rate (MFR) (190°C/2.16 kg) | 0.25 | g/10 min | ISO 1133 |
| Environmental Stress-Cracking Resistance (F0) | > 1000 | hr | ASTM D1693 |
| Carbon Black Content | 2.5 | % | ASTM D1603 |
| Retention of Mechanical Properties [1] (100°C) | > 75 | °C | ISO 527-2 |
| Oxidation Induction Time (200°C) | > 30 | min | EN 728 |

| Hardness | Nominal Value | Unit | Test Method |
|---|---|---|---|

| | | | |
|---|---|---|---|
| Durometer Hardness (Shore D) | 50 | | ISO 868 |
| Mechanical | Nominal Value | Unit | Test Method |
| Tensile Stress (Break) | 14.0 | MPa | ISO 527-2 |
| Tensile Strain (Break) | 600 | % | ISO 527-2 |
| Thermal | Nominal Value | Unit | Test Method |
| Brittleness Temperature [2] | -76.0 | °C | ASTM D746 |
| Vicat Softening Temperature | 93.0 | °C | ISO 306/A |
| Electrical | Nominal Value | | Test Method |
| Dielectric Constant (1 MHz) | 2.60 | | ASTM D2520 |
| Dissipation Factor (1 MHz) | 5.0E-3 | | ASTM D2520 |
| NOTE | | | |
| 1. | 10 days | | |
| 2. | 0 Failures | | |



## Recommended distributors for this material

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