

ADD UNITED

Addcross 1207/1357

Cross-linkable Polyethylene

ProductDescription

Addcross 1207 is a cross-linkable polyethylene compound, specially designed for Wire and Cable insulation applications and meets the requirement of the IEC 60502-1 and HD626

The Addcross 1207 base material in combination with the addcross 1357 catalyst master-batch will accelerate the moisture-induced crosslinking reaction Addcross 1207 is based upon a low density polyethylene and contains permanent scorch retardant additives which ensure safe processing and gives a possibility to use a highly active crosslinking catalyst. Addcross 1357 contains antioxidant and drying agent. Addcross 1207 is used with Addcross 1357 (a catalyst master-batch) in the ratio of 95:5

General

| | | | |
|-------------------|-----------------------------------|-------------------|------------------------------------|
| Additive | • Unspecified Additive | | |
| Features | • Black/High Purity | • Cross-linkable | • Good Process ability |
| Uses | • Appliance Wire Jacketing | • Cable Jacketing | • Self-Supporting cable insulation |
| Appearance | • Black | | |
| Form | • Pellets | | |
| Packaging | • 25 Kg moisture resistance sacks | | |
| Processing Method | • Extrusion | | |

| Physical | Nominal Value | Unit | Test Method |
|-------------------------------------|---------------|-------------------|-------------|
| Density | 0.935 | g/cm ³ | ISO 1183 |
| Melt Mass-Flow Rate(MFR)(190°C/5kg) | 3.0 | g/10 min | ISO 1133 |

| Mechanical | Nominal Value | Unit | Test Method |
|-----------------------|---------------|------|---------------|
| Tensile Stress(Yield) | > 18.0 | MPa | IEC 60811-1-1 |
| Tensile Strain(Break) | > 420 | % | IEC 60811-1-1 |

| Thermal | Nominal Value | Unit | Test Method |
|--------------------------------------|---------------|------|---------------|
| Hot Set Test | | | IEC 60811-2-1 |
| 200°C,Elongation under load,0.30MPa | < 80 | % | |
| 200°C,Permanent deformation, 0.30MPa | < 10 | % | |

| Ageing | Nominal Value | Unit | Test Method |
|--|---------------|------|---------------|
| Retention of Tensile Strength 150°C, After Ageing 240 hr | > 85 | % | IEC 60811-1-2 |

| Electrical | Nominal Value | Unit | Test Method |
|----------------------------|------------------|-------|-------------|
| Dielectric Constant (50Hz) | < 2.9 | - | IEC60250 |
| Dissipation Factor (50Hz) | < 0.001 | - | IEC60250 |
| DC Volume Resistivity | 10 ¹⁶ | Ω.cm | IEC60093 |
| Dielectric Strength | > 22 | kV/mm | IEC60243-1 |

Extrusion

As a guide the following temperature profile is recommended

| Zone 1 | Zone 2 | Zone 3 | Zone 4 | Head | Die |
|--------|--------|--------|--------|------|-----|
| 140 | 160 | 180 | 200 | 220 | 230 |

Crosslinking

These products can be cross-linked by immersion in hot water or exposed to low pressure steam at a temperature up to 90°C. This time period may be varied due to the humidity, thickness of insulation, reel size and temperature. Recommended Time to reach Hot Set elongation value of 100% at different insulation thickness is listed here:

| Insulation thickness (mm) | Time (hr) |
|---------------------------|-----------|
| 0.7 | 4 |
| 1.8 | 6 |

Note

- Test results have been achieved in lab condition with a ratio of 95 to 5. Miss handling may give different result and sometimes outside of the standard
- The specifications given are the guidelines only.
- Above compound is suitable to run on different machines; however some adjustments may be required on individual machine.
- The customers are advised to check the quality, prior to commercial use. There is no guarantee and/or warranty what so ever, after processing



MALAYSIA

1-11-3A, MENARA BANGKOK BANK (BERJAYA CENTRAL PARK),
JALAN AMPANG, 50250 KUALA LUMPUR, MALAYSIA.
EMAIL: info@addbagg.com
TELL: +60-3-2770 3625

CANADA

4850 COTE-DES-NEIGES RD, MONTREAL
QUEBEC H3V 1G5
EMAIL: info@addbagg.com
TELL: +1-514 210 0990

SOUTH-KOREA

1527-2 Sangin-dong, Dalseo-gu, Daegu,
South Korea
EMAIL: info@addbagg.com
TELL: +82-10 5096 9601