

Westlake PVC 19900 BIO

Westlake Chemical Corporation - Flexible Polyvinyl Chloride

Friday, September 20, 2019

General Information

Product Description

105C, VW-1 rated non-lead insulation with good flexibility. Ideally suited for 1/64 wall (18 AWG and larger). UL approved for tW, THW, THHW applications. Fungus resistant per ASTM G-21.

General

| | | | |
|-----------------|------------------------------|-------------------------------|-----------|
| Material Status | • Commercial: Active | | |
| Availability | • North America | | |
| Uses | • Insulation | • Wire & Cable Applications | |
| Wire Types | • THHW • THW | • TW • VW-1 | |
| Agency Ratings | • ASTM G21 • UL Type THHW | • UL Type THW • UL Type TW | • UL VW-1 |

ASTM & ISO Properties ¹

| Physical | Nominal Value | Unit | Test Method |
|--|---------------|-------------------|-------------|
| Density / Specific Gravity | 1.29 to 1.35 | g/cm ³ | ASTM D792 |
| Mechanical | Nominal Value | Unit | Test Method |
| Tensile Strength | | | ASTM D638 |
| -- | 16.9 | MPa | |
| 100% Strain | 12.4 | MPa | |
| Tensile Elongation (Break) | 330 | % | ASTM D638 |
| Hardness | Nominal Value | Unit | Test Method |
| Durometer Hardness (Shore A, 10 sec) | 88 to 94 | | ASTM D2240 |
| Thermal | Nominal Value | Unit | Test Method |
| Brittleness Temperature | -24.0 | °C | ASTM D746 |
| Aging | Nominal Value | Unit | Test Method |
| Change in Ultimate Elongation in Air ² (136°C, 3264 hr) | -20 | % | UL 1581 |
| Change in Ultimate Elongation ² (100°C, 96 hr, in Oil) | -14 | % | UL 1581 |
| Electrical | Nominal Value | Unit | Test Method |
| Volume Resistivity (-5°C) | 1.5E+15 | ohms-cm | ASTM D257 |
| Flammability | Nominal Value | Unit | Test Method |
| Oxygen Index | 28 | % | ASTM D2863 |

Processing Information

| Extrusion | Nominal Value | Unit |
|------------------|---------------|------|
| Melt Temperature | 185 | °C |

Notes

¹ Typical properties: these are not to be construed as specifications.

² 30 mil slabs