# MEGOLON S500

## Alphagary - Thermoplastic

### General Information

**Product Description**

MEGOLON® S500 is a thermoplastic, halogen free, fire retardant cable sheathing compound for general purpose applications. It exhibits good processing characteristics - using a low compression, MEG type screw, processing speeds similar to those of PVC can be achieved. It can also be processed on a simple PVC screw at lower speeds.

APPLICATIONS

- UK: BS 7878: 7 (HD 624.7 S1)
- Germany: DIN VDE 0207, part 24, type HM2
- France: Norme Française NF C 32-323

**General**

| | | | |
|---|---|---|---|
| Features | • Flame Retardant<br>• General Purpose | • Good Processability<br>• Halogen Free | • Low Compression Set |
| Uses | • Cable Jacketing | • General Purpose | • Wire & Cable Applications |
| Agency Ratings | • BS 7878:7 (HD 624.7 S1) | • DIN VDE 0207, Part 24, Type HM2 | • NFC 32-323 |
| Processing Method | • Extrusion | • Wire & Cable Extrusion | |

### Properties [1]

| Physical | Nominal Value | Unit | Test Method |
|---|---|---|---|
| Density / Specific Gravity | 1.46 | | ASTM D792 |
| Melt Mass-Flow Rate (MFR) (150°C/21.6 kg) | 10 | g/10 min | ISO 1133 |
| **Mechanical** | **Nominal Value** | **Unit** | **Test Method** |
| Tensile Stress | | | |
| -- | 1600 | psi | IEC 60811-501 |
| -- [2] | 1810 | psi | IEC 60811-401 |
| Tensile Strain | | | |
| Break | 180 | % | IEC 60811-501 |
| Break [2] | 150 | % | IEC 60811-401 |
| **Elastomers** | **Nominal Value** | **Unit** | **Test Method** |
| Tear Strength | 37.1 | lbf/in | BS 6469 99.1 |
| **Hardness** | **Nominal Value** | **Unit** | **Test Method** |
| Durometer Hardness (Shore D) | 54 | | ASTM D2240 |
| **Thermal** | **Nominal Value** | **Unit** | **Test Method** |
| Brittleness Temperature | -20.2 | °F | ASTM D746 |
| Cold Elongation (-13°F) | 96 | % | IEC 60811-505 |
| Cold Impact - No Cracks (-13°F) | Pass | | IEC 60811-506 |
| Hot Deformation | 5.0 | % | BS 6469 99.1 |
| Hot Pressure Test (176°F) | 25 | % | IEC 60811-508 |
| **Aging** | **Nominal Value** | **Unit** | |
| Change in Tensile Strength in Air (212°F, 168 hr) | 12 | % | |
| Change in Tensile Strain at Break in Air | | | |
| 212°F, 168 hr | -18 | % | |

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| Electrical | Nominal Value | Unit | Test Method |
|---|---|---|---|
| Dielectric Strength | 1400 | V/mil | |
| Dielectric Constant (50 Hz) | 4.30 | | ASTM D150 |
| Dissipation Factor (50 Hz) | 0.015 | | ASTM D150 |
| Insulation Resistance | | | BS 6469 99.2 |
| 68°F | 5.0E+14 | ohms·cm | |
| after 12 hours immersion in water : 68°F | 2.0E+14 | ohms·cm | |

| Flammability | Nominal Value | Unit | Test Method |
|---|---|---|---|
| Oxygen Index | 35 | % | ISO 4589-2 |
| Flammability Temperature Index | 491 | °F | ISO 4589-3 |

### Notes

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

[2] after 7 days at 100°C