

IPOTEC

Innovation in Polymer Technology

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TECHNICAL DATA:

GS-N5 INSULATION SLEEVING - SILICONE RUBBER COATED FIBERGLASS

Thermal Properties

| | |
|---------------------------------|--|
| Operating temperature range | -70°C (-95°F) to 200°C (392°F); Can withstand short term exposure to 300°C (570°F) without deterioration in performance. |
| Brittle temperature (ASTM D746) | -75°C (-103°F) |
| Flammability | GS-N5 - Extremely slow burning; zero burn rate under UL1441 horizontal flame test. GS-N5-FR - Self extinguishing; zero burn rate under UL1441 VW-1 vertical flame test. |

Physical Properties (Typical)

| | |
|--|--|
| Glass fiber properties | - Electrical grade fiberglass, free from impurities; Environmentally safe (solvent-free) adhesion process. |
| Coating Properties | |
| Durometer (ASTM D2240) | - 50 Sh A |
| Tensile strength (ASTM D412) | - 960 psi |
| Elongation (ASTM D412) | - 300% |
| Push back after heat aging (ASTM D350 168 hrs / 250°C) | - No cracks |

Excellent resistance to cut-through and abrasion. Highly flexible.

Chemical Properties

Resistant to moisture and weathering and to most chemicals and solvents;
Compatible with most potting compounds and varnishes.

Electrical Properties

See following page

Unless specifically stated data relates to general-purpose materials. Some properties of special grades may differ. Information provided in this data sheet is indicative and is given in good faith but without warranty, express or implied. Whilst test results are deemed to be reliable, performance of these products is dependent on conditions of use and it is the responsibility of the user to determine suitability for a particular application.

Electrical Properties

Dielectric Breakdown Strength

| Sleeving Reference | ASTM D372 / NEMA TF-1 Grade | Conditioning (hrs/degC/%RH) | Specification | | Typical Value |
|-------------------------------|-----------------------------|-----------------------------|-----------------|--------------------|---------------|
| | | | Minimum Average | Minimum Individual | |
| GS-N5A GS-N5A-FR GS250A | A | 48 / 23 / 50 | 8000V | 6000V | 10000V |
| | | 96 / 23 / 93 | 6400V | 4800V | 9000V |
| GS-N5B GS-N5B-FR GS250B | B | 48 / 23 / 50 | 4000V | 2500V | 6000V |
| | | 96 / 23 / 93 | 3200V | 2000V | 5000V |
| GS-N5C GS-N5C-FR GS250C | C | 48 / 23 / 50 | 4000V | 2500V | 6000V |
| | | 96 / 23 / 93 | 3200V | 2000V | 5000V |

Dielectric breakdown strength after aging 7 days at 265°C - average 90-110% of original.

Excellent resistance to corona discharge.