

CHEMTECH BROCHURE

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SCGC™ XLPE

Crosslinkable Polyethylene Compounds

Grade	LS124NTA	LS126NTA
Recommended applications	Low Voltage wire and cable insulation with thickness 0.5 – 2.0 mm.	Low Voltage wire and cable insulation with thickness 0.5 – 2.0 mm.
Key characteristics	Easy to process Good surface/ Low shrinkage Good crosslinking properties Passed heat aging (150oC x 10days) with the copper conductor. Crosslinkable by immerse in hot water (90°C) for 1 hours or ambient cure 2 days for thickness 1 mm.	Contains metal deactivators Easy to process Good surface/ Low shrinkage Good crosslinking properties Crosslinkable by immerse in hot water (90°C) for 1 hours or ambient cure 2 days for thickness 1 mm.
Melt flow rate (base resin) @190°C, 2.16kg (g/10min) ASTM D-1238	2-2.8	2-2.8
Density (g/cm³) ASTM D-1505	0.92	0.92
Hot-Set test @200°C, 0.2 Mpa, 15 min (%) IEC 60811-2-1	30/-10	30/-10
Tensile strength (Mpa) IEC 60811-1-1	>18	>18
Elongation at break (%) IEC 60811-1-1	>450	>450
Dielectric strength (kV/mm) IEC 60243	>30	>30
Dielectric constant (50 Hz) IEC 60250	>2.0	>2.0
Volume resistivity (1 kV) (x10¹⁶ Ohm.cm) IEC 60093	>1	>1
Gel content (%) ASTM D-2765	>70	>70



SCGC™ XLPE

Crosslinkable Polyethylene Compounds

Grade	LS212NTA	LS224NTA
Recommended applications	Low Voltage wire and cable insulation with thickness 0.8 – 2.5 mm.	Low Voltage wire and cable insulation with thickness 0.5 – 2 mm.
Key characteristics	Fast curing time Improved surface/ Low shrinkage Good crosslinking properties Crosslinkable by immerse in hot water (90°C) for 0.5 hours or ambient cure 1.5 days for thickness 1 mm.	High line speed Improved surface/ Low shrinkage Good crosslinking properties Crosslinkable by immerse in hot water (90°C) for 2 hours or ambient cure 4 days for thickness 1 mm.
Melt flow rate (base resin) @190°C, 2.16kg (g/10min) ASTM D-1238	2-2.8	2-2.8
Density (g/cm³) ASTM D-1505	0.92	0.92
Hot-Set test @200°C, 0.2 Mpa, 15 min (%) IEC 60811-2-1	40/-8.5	70/-7.5
Tensile strength (Mpa) IEC 60811-1-1	>18	>18
Elongation at break (%) IEC 60811-1-1	>450	>450
Dielectric strength (kV/mm) IEC 60243	>30	>30
Dielectric constant (50 Hz) IEC 60250	>2.0	>2.0
Volume resistivity (1 kV) (x10¹⁶ Ohm.cm) IEC 60093	>1	>1
Gel content (%) ASTM D-2765	>70	>70



SCGC™ XLPE

Crosslinkable Polyethylene Compounds

Grade	LS243NTA	LS244NTA
Recommended applications	Medium Voltage wire and cable insulation with thickness 3 – 5.5 mm, up to 24 KV.	Medium Voltage wire and cable insulation with thickness 3 – 5.5 mm, up to 24 KV.
Key characteristics	Fast curing time Good surface/ Low shrinkage Crosslinkable by immerse in hot water (90°C) for 10-12 hours or ambient cure 21 days for thickness 5.5 mm.	High line speed Fast curing time Improved surface/ Low shrinkage Good crosslinking properties Crosslinkable by immerse in hot water (90°C) for 10-12 hours or ambient cure 21 days for thickness 5.5 mm.
Melt flow rate (base resin) @190°C, 2.16kg (g/10min) ASTM D-1238	2-2.8	2-2.8
Density (g/cm³) ASTM D-1505	0.92	0.92
Hot-Set test @200°C, 0.2 Mpa, 15 min (%) IEC 60811-2-1	30/-9.8	35/-7.5
Tensile strength (Mpa) IEC 60811-1-1	>18	>18
Elongation at break (%) IEC 60811-1-1	>450	>450
Dielectric strength (kV/mm) IEC 60243	>30	>30
Dielectric constant (50 Hz) IEC 60250	>2.0	>2.0
Volume resistivity (1 kV) (x10¹⁷ Ohm.cm) IEC 60093	>1	>1
Gel content (%) ASTM D-2765	>70	>70



SCGC™ XLPE

Crosslinkable Polyethylene Compounds

Grade	LS206NTA	LS210NTA
Recommended applications	Low Voltage wire and cable insulation with thickness 0.5 – 2 mm.	Low Voltage wire and cable insulation with thickness 0.5 – 2 mm.
Key characteristics	Easy to process Good surface/ Low shrinkage Provide good crosslinking Crosslinkable by immerse in hot water (90°C) for 2 hours or ambient cure 7 days for thickness 1 mm.	Good surface/ Low shrinkage Crosslinkable by immerse in hot water (90°C) for 1 hours or ambient cure 2 days for thickness 1 mm.
Melt flow rate (base resin) @190°C, 2.16kg (g/10min) ASTM D-1238	2-2.8	2-2.8
Density (g/cm³) ASTM D-1505	0.92	0.92
Hot-Set test @200°C, 0.2 Mpa, 15 min (%) IEC 60811-2-1	70/-7.5	65/-8.8
Tensile strength (Mpa) IEC 60811-1-1	>18	>18
Elongation at break (%) IEC 60811-1-1	>450	>450
Dielectric strength (kV/mm) IEC 60243	>30	>30
Dielectric constant (50 Hz) IEC 60250	>2.0	>2.0
Volume resistivity (1 kV) (x10¹⁶ Ohm.cm) IEC 60093	>1	>1
Gel content (%) ASTM D-2765	>70	>70



SCGC™ XLPE

Crosslinkable Polyethylene Compounds

Grade	LS211NTA	LS220NTA
Recommended applications	Low Voltage wire and cable insulation with thickness 1.0 – 2.5 mm.	Low Voltage wire and cable insulation with thickness 0.5 – 2 mm.
Key characteristics	Good surface/Low shrinkage High crosslink rate to meet a NFC 33-209 standard. Crosslinkable by immerse in hot water (90°C) for 1 hours or ambient cure 2 days for thickness 1 mm.	Contains metal deactivator Good surface/Low shrinkage Crosslinkable by immerse in hot water (90°C) for 2 hours or ambient cure 4 days for thickness 1 mm.
Melt flow rate (base resin) @190°C, 2.16kg (g/10min) ASTM D-1238	2-2.8	2-2.8
Density (g/cm³) ASTM D-1505	0.92	0.92
Hot-Set test @200°C, 0.2 Mpa, 15 min (%) IEC 60811-2-1	40/-8.7	70/-9.5
Tensile strength (Mpa) IEC 60811-1-1	>18	>18
Elongation at break (%) IEC 60811-1-1	>450	>450
Dielectric strength (kV/mm) IEC 60243	>30	>30
Dielectric constant (50 Hz) IEC 60250	>2.0	>2.0
Volume resistivity (1 kV) (x10¹⁶ Ohm.cm) IEC 60093	>1	>1
Gel content (%) ASTM D-2765	>70	>70



SCGC™ XLPE

Crosslinkable Polyethylene Compounds

Grade	LS225NTA	LS226NTA
Recommended applications	Low Voltage wire and cable insulation with thickness 0.5 – 2.2 mm.	Low Voltage wire and cable insulation with thickness 0.5 – 2.2 mm.
Key characteristics	High line speed Good surface/ Low shrinkage Crosslinkable by immerse in hot water (90°C) for 2 hours or ambient cure 4 days for thickness 1 mm.	UV stabilized High line speed Good surface/ Low shrinkage Crosslinkable by immerse in hot water (90°C) for 2 hours or ambient cure 4 days for thickness 1 mm.
Melt flow rate (base resin) @190°C, 2.16kg (g/10min) ASTM D-1238	2-2.8	2-2.8
Density (g/cm³) ASTM D-1505	0.92	0.92
Hot-Set test @200°C, 0.2 Mpa, 15 min (%) IEC 60811-2-1	70/-7.5	60/-10
Tensile strength (Mpa) IEC 60811-1-1	>18	>18
Elongation at break (%) IEC 60811-1-1	>450	>450
Dielectric strength (kV/mm) IEC 60243	>30	>30
Dielectric constant (50 Hz) IEC 60250	>2.0	>2.0
Volume resistivity (1 kV) (x10¹⁶ Ohm.cm) IEC 60093	>1	>1
Gel content (%) ASTM D-2765	>70	>70