Product Data sheet

03 Jan 2023 Rev 0

SEJI CHEMICAL CO,. LTD.

SJ-605

Crosslinkable Shielding Compound for Jacketing

Overview

SJ-605 is based on crosslinkable linear low-density polyethylene and has a specially designed additive package to give excellent track resistance.
It is also well protected against UV degradation in order to ensure outstanding weathering resistance.
SJ- 605 is gray in color and can also be used in other applications where thermoset track resistant materials can be applied.

Specifications

ICEA S-121-733

Properties

This TDS is typical data only and are not to be construed as specifications. Users should results their own test. Tests are conducted on compression molded slabs cured 15 minutes at 180℃.

Physical	Value (English)	Value (SI)	Test Method
Density at 23°C[73.4°F]	0.96 g/㎤	0.96 g/㎤	ASTM D 1505
Moisture Content	300 ppm	300 ppm	ASTM D 6869
Brittleness temperature	<-70 ℃	<-70 ℃	ASTM D 746

Mechanical	Value (English)	Value (SI)	Test Method
Ultimate Tensile Strength	2901 psi	20.0 Mpa	ASTM D 638
Elongation at Break	400 %	400 %	ASTM D 638
Retention of Tensile Strength After Ageing - 135°C[275°F], 168hrs	90 %	95 %	IEC 60811-401
Retention of Elongation After Ageing - 135°C[275°F], 168hrs	90 %	95 %	IEC 60811-401
Hot Set Test[200°C, 0.2MPa) Elongation under load	120 %	120 %	IEC 60811-507
Hot Set Test[200°C, 0.2MPa) Permanent deformation	1.5 %	1.5 %	IEC 60811-507
UV Absorptio Coeffcient	>400 Abs/mm	>400 Abs/mm	ASTM D 3349

Electrical	Value (English)	Value (SI)	Test Method
Time to track at 4.5kV	>17 h	>17 h	ASTM D 2303
Volume Resistivity at 23℃[73.4°F]	$1.0x10^{15}$ Ωcm	$1.0x10^{15}$ Ωcm	ASTM D 257
Dissipation Factor	0.00025 60MHz	0.00025 60MHz	ASTM D 1531
Dielectric Constant	2.1 1MHz	2.1 1MHz	ASTM D 1531
Dielectric Strength	500 Volt/mil	500 Volt/mil	ASTM D 496

Processing

SJ-605 provides excellent surface finish and outstanding output rates over a broad range of extrusion conditions.
SJ-605 requires melt stock temperatures in the range of 110℃ to 120℃ for best results.
Lower melt temperatures may result in unmelted extrudate and higher melt temperatures may result in extrudate scorch and It can even trigger die-drools.
The curing configuration : the maximum cable surface temperature in the curing zone should be maintained below 400ºC. If the surface temperature of the cable in the curing zone is over

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400ºC, it may cause cracks in the cable, so careful temperature control is required.
Dehumidified hopper drying at 60~70℃ for up to 4 hours prior to extrusion could help remove moisture. Specific processing conditions depend on equipment and cable dimensions.
Optimum conditions by conventional practices should be established.

Packing & Storage

Packed in 600kg polybag lined carton box.
Recommended maximum storage period is 12months unopened and in original packaging after the manufacture.

Stored at room temperatures 86 ℉ 30 ℃
The shelf life of this product is 1 year from the date of manufacture.

Safety

Please contact Seji Chemical for Material Safety Data Sheet.

Disclaimer

Information contained in this data sheet is up-to-date and correct as at the date of issue.
Seji chemical Co., Ltd. cannot control or anticipate the conditions under which this product may be used, each user should review the information in specific context of the planned use.
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