Product Data sheet

06 May 2020 Rev 0

SEJI CHEMICAL CO,. LTD.

SJ-507ES

Semiconductive Shielding Compound

Overview

SJ-507ES is a outstanding semiconductive thermoplastic compound for insulation shielding of medium voltage power cable.[KEPCO 22.9kV TR-CNPE]

SJ-507ES is manufactured using a thermoplastic with medium or high voltage capacity,
Its provides better performance than XLPE operating temperature.[up to 110°C]

Specifications

This compound has no specifications.
The user should select and use the application suitable for the characteristics.

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 5 minutes at 230℃.

Physical	**Value (English)**	**Value (SI)**	**Test Method**
Density	1.12 g/㎤	1.12 g/㎤	ASTM D 1505
Moisture Content	300 ppm	300 ppm	ASTM D 6869
Melt Flow Rate[230°C(446°F)/10.0 kg]	6.50 g/10min	6.50 g/10min	ASTM D 1238
Brittleness temperature	<-40 °C	<-40 °C	ASTM D 746

Mechanical	**Value (English)**	**Value (SI)**	**Test Method**
Ultimate Tensile Strength	1595 psi	11.0 Mpa	ASTM D 638
Elongation at Break	250 %	250 %	ASTM D 638
Retention of Tensile Strength After Ageing - 135°C[275°F], 168hrs	85 %	85 %	IEC 60811-401
Retention of Elongation After Ageing - 135°C[275°F], 168hrs	85 %	85 %	IEC 60811-401
Stripping Force[250mm/min, width 10mm, 23°C(73°F) 180angle]	14.28 lbs/in	2.50 kN/m	ASTM D 903

Electrical	**Value (English)**	**Value (SI)**	**Test Method**
Volume Resistivity			ASTM D 991
at 23℃[73.4℉]	300 Ωcm	300 Ωcm	
at 110℃[230°F]	2,000 Ωcm	2,000 Ωcm	

Processing

SJ-507ES provides excellent surface finish and outstanding output rates over a broad range of extrusion conditions.
SJ-507ES requires melt stock temperatures in the range of 190℃ to 230℃ for best results.
Lower melt temperatures may result in unmelted extrudate and higher melt temperatures may result in extrudate trigger die-drools.
Dehumidified hopper drying at 90℃ 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.

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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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