An ISO 9001:2015 company TECHNICAL DATA

Silane Grafted Track resistance Black XLPE Compound: KI – XL- 3381 BK/KI-XL-81-TR MB

### **DESCRIPTION:**

KI-XL-3381BK is a Silane Grafted, Moisture curable by addition of a catalyst masterbatch (KI-XL-81-TR MB) crosslinkable black track resistant cable sheathing/ jacketing compound for medium voltage power cables / MVCC cables.

KI-XL-3381BK has a specially designed additive package to give excellent track resistance properties. It is also well protected against UV degradation in order to ensure weathering properties.

# **Technical Properties:**

KI-XL-3381BK gives excellent Track resistance as per EN 50397-1 & IEC 60587.

Properties	Unit	Typical Value	Test Method
Density of Compound	gm / cm <sup>3</sup>	1.15	ASTM D-792
Melt flow index @ 190°C / 10 kg_load	gm / 10 min	3.0	ASTM D-1238
Hot Elongation, at 200°C for 15 minutes at 2.0 N/mm² Load.*	%	80	IEC 60811-507
Tensile Strength at break*	MPa	> 16	ASTM-D-638
Elongation at Break*	%	> 500	ASTM-D-638
ESCR @ 50°C (No failure)	Hrs.	> 2000	ASTM-D-1693
Hardness	Shore D	59 - 60	ASTM-D-2240
Di-electric Strength	KV/mm	> 20	ASTM-D-149
Track resistance properties (3.50 KV,0.3ml contaminates per minute)	Hrs	> 6	IEC 60587

<sup>\*</sup> Extruded tape of KI - XL- 3381 BK / KI-XL-81-TR-MB in 95:5 ratio having thickness of 1.5 mm thickness, cured at 85 $^{\circ}$ C for 3 hours.

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#### RECOMMENDED PROCESSING CONDITIONS:

It is recommended to dry the catalyst master batch KI-XL-81-TR-MB at 65°C in an air oven in 4-6 cm layers for 4-6 hours. The grafted Polymer should never be pre heated.

The Grafted KI-XL-3381BK compound and catalyst master batch KI-XL-81-TR-MB should be manually mixed at 95:5 Parts at room temperature, just before consumption. Mixing in large quantities should be avoided, since such leftover premix cannot by stored and consumed at a later date.

During extrusion, following temperature profile is suggested as a general guideline.

Position	Temperature (°C)	
Barrel Zones	150 – 170 °C	
Head	175°C	
Die	190 - 200 °C	

These conditions are for guideline only and may vary depending on the extruder and crosshead type and size and tools design.

#### **PACKAGING:**

Aluminum foil Multilayer bag of 25 Kgs. 20" FCL will take palletized 11 MT & 40" will take 24.75 MT.

## STORAGE:

The shelf life of the product is 90 days (In case of Export packaging the shelf life is guaranteed for 180 days instead of 90 days) from the date of production, subject to following conditions:

- Storage temperature not generally exceeding 25 °C
- Away from direct sunlight and weathering.
- Closed and unbroken bags.

The information given in the document is believed to be reliable and is given in the good faith but without warranty. The user should test the product to ascertain the suitability for the intended use. Product specification or the whole document is subject to change without any prior notice.

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