



Ddev Plastiks Industries Limited

An ISO 9001:2015 company
TECHNICAL DATA

Crosslinkable Halogen free Cable Insulation Compound: KI-LSHF-3301 XL & KI XL 04 FX UV

DESCRIPTION :

KI-LSHF-3301 XL & KI-XL 04 FX UV is a Zero halogen, Low smoke, Flame retardant, Silane Grafted, Moisture curable by addition of a catalyst masterbatch crosslinkable compound for insulation applications. It contains metal deactivator and suitable UV additive system for direct insulation on copper conductor and outdoor application.

SPECIFICATION:

EN 50363-5 EI5, IEC 60092/351 HF 90, VDE 0207 /23 HJ1, IS 17048 HFI XL 90

TYPICAL PROPERTIES :

Property	Test Method	Unit	Range Value
Density	ASTM-D-792	gm / cm ³	1.50
Melt Flow Index, 150 ⁰ C-21.6 kgs	ASTM D-1238	gm/ 10 min	5
Hardness	ASTM-D-2240	Shore D	48
Tensile Strength at break	ASTM D-638	MPa	13
Elongation at break	ASTM D-638	%	200
Variation in Tensile strength*	IEC 60811	%	±25
Variation in Elongation at break*	IEC 60811	%	±25
Hot Elongation, at 200 ⁰ C for 15 minutes at 02. N/mm ² Load .	IEC 60811-1-2	%	80
Limiting Oxygen Index	ASTM-D-2863	%	30
Temperature Index	ASTM-D-2863	°C	290
Smoke Density Rating	ASTM-D-2843	%	8
Halogen acid gas emission	IEC 60754-1	%	Nil
Corrosivity of gases	IEC 60754-2		
PH		-	5.6
Conductivity		μS/mm	1.6
Toxicity Index	NES 713	-	2.6
Volume Resistivity	ASTM D 257	Ohm-cm	1.25 x 10 ¹⁴

* After Heat ageing at 135°C for 168 hours.

* Data is for information purpose only and should not be used for specification work.

MKT: TDS – LSHF/3301XL – 12/2023

RECOMMENDED PROCESSING CONDITIONS:

It is recommended to dry the catalyst master batch KI- XL 04 FX UV 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-LSHF-3301 XL compound and catalyst master batch KI- XL 04 FX UV 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 be stored and consumed at a later date.

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

Position	Temperature (°C)
Barrel Zones	130 – 165 °C
Head	165°C
Die	170 - 180 °C

Screw: Recommended ZHFR screw with low compression ratio 1.2-1.5:1

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

The use of breaker plate is advisable, in particular low compression screws.

A wide range of PE based colour master batches are applicable; it is suggested an addition of 1- 1.5% (approx.) by weight.

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.