



ELECTROPLAST® UNIVERSAL COMPOUNDING LLP

TECHNICAL DATA SHEET EBXL (EP-05)

Description:

EBXL (EP-05) is a Halogen Free, Flame Retardant, Low smoke, compound. It is an **Electron-Beam** cross-linkable polyolefin compound for **insulation of Automotive cables**. It has good abrasion resistance, mechanical, and electrical properties. The material contains a metal deactivator, hence suitable for direct insulation on bare copper conductor.

Specifications: EP-05 conforms to ISO 6722, 19642 and JIS 618.

Typical Properties after Cross linking and Curing:

Property	Test Method	Unit	Typical Value
Density at 27°C	ASTM D 792	g/cm ³	1.28
Hardness	ASTM D 2240	Shore A	68
Tensile Strength at break	IEC 60811-1-1	MPa	10
Elongation at Break	IEC 60811-1-1	%	290
Variation in Tensile Properties after heat ageing (7 days at 150°C) - Tensile strength - Elongation	IEC 60811-1-2	% %	+10 -15
Hot Set Elongation, at 250°C for 15 min. at 0.2 N/mm ² load	IEC 60811-2-1	%	45
Elongation after unloading (P.S)	IEC 60811-2-1	%	Nil
Retention of Tensile Properties after UV- Exposure for 720 Hours Tensile Strength Elongation at break	ASTM G 154	%	88 86
Volume Resistivity @ 70°C, 2h (Water Immersion)	ASTM D 257	Ohm-cm	2 x 10 ⁻¹⁴
Volume Resistivity @ 70°C,	ASTM D 257	Ohm-cm	2 x 10 ⁻¹⁵

All properties have been determined on Extruded tape after Crosslinking and Curing.

Processing Guidelines: Recommended low compression ratio 1.2 - 1.5:1 extrusion line. The recommended melt extrusion temperature is 120°C – 150°C. The actual processing condition has to be determined by trial on specific extruder as this may vary depending on the extruder, cross head and tooling used.

EP-05 is a **cross linkable compound** through **Electron beam**. And recommended dosage is **7 to 9 Mrad** depending upon the insulation/Sheath thickness, line-speed and properties desired in for the Cable.

Pre-Drying: EP-05 Compounds absorb moisture, which is undesirable to get smooth surface. It is therefore recommended that the compound should be thoroughly dried (preferably by dehumidified hot air) at 70°C – 80°C for 50 – 60 minutes prior to changing in extruder feed.

Shelf Life/Storage:

EP-05 can be used for 6 months from the date of manufacturing, without significant deterioration of the quality of material. However, it is recommended to be consumed as soon as possible.

EP-05 is recommended to be stored at in a cool, dry & clean environment in unopened original packaging.

📍 Plot No. 14, Waghodia, Vadodara, Gujarat - 390019 (BHARAT)



ELECTROPLAST® UNIVERSAL COMPOUNDING LLP

Packaging:

25 Kg packed in **Double Moisture Barrier Multilayer Alu-Myler liner** with PP Woven bag.

Safety:


EP-05 is not classified as dangerous preparation.

The products are supplied in the form of free-flowing granules of approx. 2-3 mm size and can be readily handled with commercially available equipment. Handling and transporting products may generate some dust and fines, which constitute a potential hazard for dust explosion. All metal parts in the system should therefore be properly grounded. Properly designed equipment and good housekeeping will reduce the risk. Inhalation of any type of dust should be avoided as it may cause irritation of the respiratory system. The product is intended for industrial use only. MSDS is available on request.

Disclaimer:

- The specifications given are the guidelines only.
- Above compound is suitable to run on different machines; however, some adjustments may be required on individual machine.
- All properties are tested as per ASTM/IS/IEC standards.
- Any data may change without prior information.
- The customers are advised to check the quality, prior to commercial use. There is no guarantee and/or warranty whatsoever, after processing.



 Plot No. 14, Waghodia, Vadodara, Gujarat - 390019 (BHARAT)