



KLJ POLYMERS & CHEMICALS LIMITED

KLJ-ZHFR COMPOUND

KLJ-ZHFR- 3220

Thermoplastic Zero Halogen Flame Retardant Compound for cable grades.

Description :- KLJ-ZHFR 3220 is based on thermoplastic compound containing a flame retardant system and self extinguishable properties. Compound does not emit halogenic acid and produce very low gases, and low smoke under fire condition.

Specifications:

The cable made by the above grades are meeting the following standard specification.
 BS EN :- 50363 Type TI6 & TI7
 VDE 0270/24 VDE 0207/23 Hj1
 BS 7211

Physical Properties: (Typical)

Sr.No	Parameter	Unit	Test Method	Typical Value
01	Density	GM/CC	ASTM-D-792	1.45±0.02 -
02	Hardness	Shore-D	ASTM-D-2240	47±2
03	Tensile Strength (min.)	Mpa	IEC-811-1-1	10.5
04	Elongation at break (min.)	%	IEC-811-1-1	200
05	Variation in properties after ageing		After Aging in Air at 100°C for 168 Hrs.	
A	Tensile Strength	%	IEC-811-1-2	±20
B	Elongation at break	%	IEC-811-1-2	±20
06	Oxygen Index (Min.)	%	ASTM D-2863	30.5 Min
07	Smoke Density rating (Max.)	%	ASTM D-2863	20 Max
08	Pressure Test at 80°C max indentation	%	IEC 811-3-1	35 max
09	Acid gas emission test (% HCL Emission) (Max)	%	IEC-60754 Part-1	0.30% -

Processing Guidelines:

KLJ-ZHFR - 3220 compound is processed on standard extruders for thermoplastics equipped with low compression and low shear screw, with 22– 25 L/D ratio of the extruder. Screw compression ratio is 1.15 – 1.2:1. There should not be any stagnant area in the die and X-head.

Recommended DDR is 2:1, or less than 2.

The recommended temp. profile:-

Zone1	Zone-2	Zone 3	Zone 4	Flange	head & Die
120°C	130°C	140°C	150°C	150°C	165±5°C

prior to extrusion KLJ ZHFR is to be dried at 60°C for 2-3 hrs in drying oven

Coloring:

KLJ-ZHFR is colorable compound. EVA or polyolefinic base master batch can be added.

Storage: The product should be stored in cool & dry conditions. Avoid direct exposure to sunlight.

Packaging:

- KLJ-ZHFR is available in the form of free flowing pellets and supplied in 25 kg bags.

Storage:

- Storage shall take place indoors at temp. below 23°C with dry conditions

Safety:

KLJ-ZHFR are 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 transport of the 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 warrantee what so ever, after processing.