

Round Tubes



VETRONITE FR-5 HF CTI 600M T

- **Very high mechanical strength also at elevated temperatures**
- **Excellent electrical properties at high relative humidity**
- **Halogen free**
- **Low smoke emission and toxicity in case of fire**
- **Certified acc. to EN 45545, R22/R23**
- **UL-listed acc. to UL 94-V0, file no. E47629**
- **High tracking resistance CTI 600 M**

	Unit	Value	Test norm
Mechanical properties			
Flexural strength	MPa	420	EN 61212-2
E-Modulus	MPa	22000	ISO 178
Compressive strength axial	MPa	220	EN 61212-2
Cohesion between layers	MPa	450	EN 61212-2
Electrical properties			
Insulation resistance after immersion in water	Ohm	1.0E+8	DIN EN 62631-3-3
Breakdown voltage // 90°C in oil	kV	75	IEC 60243-1
Electric strength ⊥ 90°C in oil	kV/mm	15	IEC 60243-1
Comparative tracking index (CTI)	V	600	IEC 60112
Thermal properties			
Temperature index (TI)	°C	180	IEC 60216
Physical properties			
Density	g/cm ³	1.9	ISO 1183
Water absorption 24 h 23°C	%	0.11	ISO 62
Other properties			
Flammability	class	V-0	UL 94

Description

Vetronite FR-5 HF CTI 600M T consists of a special high temperature epoxy resin system with reinforcement of glass cloth. The material is halogen free and has a temperature index of 180°C.

RoHS Directive

Hazardous products listed in the EU-directive 2011/65/EU (RoHS-directive), annex II and amendment 2015/863/EU are not used as ingredients in this material.

Colour

Dark red

Application

Insulating tubes for usage in passenger transportation. Mechanical and electrical applications requiring a self-extinguishing and also halogen free material.

Form of delivery

This type will be supplied in form of tubes and machined parts out of tubes. Diameter: From 5 mm to 450 mm.

The length is related to the diameter, standard length approx. 1.000 mm. Other diameters and lengths on request.

Tolerances acc. to DIN EN 61212-3-1

The data supplied are typical values. They are not to be considered specification values. All of the information, suggestions, and recommendations about these properties and uses of the products herein are based on tests and data believed to be accurate; however, the final determination regarding the suitability of any material described herein for the contemplated application, the manner of such use, and whether the use infringes any patents is the sole responsibility of the user. There is no warranty - expressed or implied - including, without limitation, warranties of merchantability or fitness for a particular purpose. Under no circumstances shall we be liable for incidental or consequential loss or damage.

VRI Composites custom fabricates insulation materials to the exact specifications and drawings specified by our customers. We offer our customers the proper product for their specific application. A variety of dimensions and diameter sizes are available. Product colors vary according to material type.