



FR331W HFFR TPE Cable Compound

◆ Application

FR331W is TPE base flame retardant flexible cable compound. It is designed for wind power cable, power cord, phone wire, USB connector cable, wiring for computer and peripheral equipment. With its softness and perfect physical and mechanical properties, it is highly weather-resistant, flame retardant (VW-1) and easy to process.

◆ Property Parameter

Item	Unit	Typical Value	Test Method
Density	g/cm ³	1.08	ISO 1183
Hardness	Shore A	85	ISO 2039-2
HCL generation	%	ND	IEC 60754-1
Conductivity	μS/mm	2.0	IEC 60754-2
20°C Volume Resistivity	Ω .m	2.0 x 10 ¹⁵	IEC 60093
pH Value		6.2	IEC 60754-2
Tensile Strength	MPa	15	IEC 60811
Elongation	%	420	IEC 60811
Heat Aging Method	°C x h	136 °C x168h	IEC 60811
Change of Tensile Strength	%	5	IEC 60811
Change of Elongation	%	12	IEC 60811
Heat Deformation (150°C)	%	10	IEC 60811
Cold Brittleness (-60°C)		Pass	IEC 60811
Flame Retardancy		VW-1, Pass	UL1581

◆ Processing Guide

1) Processing Temperature

The recommended temperature range is 140°C-190°C.

Barrel 1	Barrel 2	Barrel 3	Barrel 4	Barrel 5	Die
140°C	165°C	175°C	185°C	190°C	190°C

2) Extrusion Equipment

It can be processed in ordinary PVC processing machine, standard extruders with gradually changing screw having L/D ≥ 25.

◆ Storage & Packaging

Store in dry place at ambient temperature. Avoid direct exposure to sunlight, moisture and weathering. If water content > 0.2%, pre-dry under 80°C for 2-4 hours. Use as soon as possible after open. Standard packing of 25kg net in vacuum pack. Customized package is also available.