

Ceramifiable HCR Silicone for Safety Cables

HR-6023U(W) & HR-7023U(W) is specially designed a peroxide crosslinking silicone rubber for the manufacture of silicone insulated safety cables that maintain circuit integrity in case of fire.

FEATURES

- Good mechanical and electrical properties
- Good rheological Properties
- Good heat stability
- In case of fire formation of a ceramic-like layer with high insulation resistance and good mechanical stability without formation of corrosive or toxic gases.
- In case of fire low smoke density

APPLICATIONS

- For flame resistant cable

PROPERTIES

Catalyst : HC-2 1.5phr / DCP 1.0Phr (171°C×10min / 200°C×4hrs)

Typical Properties	Test Method	HR-6023U(W)		HR-7023U(W)	
Color	ASTM E 1716	White			
Catalyst		HC-2	DCP	HC-2	DCP
Specific Gravity	ASTM D 792	1.32	1.32	1.32	1.32
Hardness	ASTM D 2240	60	64	72	77
Tensile Strength (MPa)	ASTM D 412	8.5	9	8	8.5
Elongation (%)	ASTM D 412	280	320	250	300
Tear Strength (kgf/cm)	ASTM D 624 "B"	18	20	18	20
Volume Resistivity (ohm.cm)	ASTM D 257	6.4×10 ¹⁵	4.1×10 ¹⁵	6.4×10 ¹⁵	4.1×10 ¹⁵
Dielectric Strength (KV/mm)	ASTM D 149	24	25	23	25
Dielectric constant(50Hz)(εr)	DIN VDE 0303	3.05	3.15	3.1	3.2
Dissipation factor(50Hz)(tan δ]	DIN VDE 0303	20 × 10 ⁻³	24 × 10 ⁻³	10 × 10 ⁻³	14 × 10 ⁻³