

TSE352 Flit Plug Silicone Encapsulant

Formulated for Cable Coupler Encapsulation in Mining Applications

Product Description

GE - Advanced Materials Flit Plug Encapsulant is a two-component silicone rubber for insulative potting and encapsulation in Flit Plug applications. After mixing the two components, the material cures upon exposure to moisture in the air at room temperature. The Flit Plug Encapsulant helps serve cable coupling applications in the mining industry, by offering a unique combination of material performance and ease of use.

Applications

- Flit Plug encapsulant
- Flame proof cable connecting
- Encapsulation of electrical and electronic components
- Potting of electronic components and circuits

Key Features and Typical Benefits

- Low viscosity allows for good flowability
- Non-Flammable catalyst
- Color change after mixing. Uniform color of the mixture without streaks allows mixing confirmation
- Curable at room temperatures in 24 hours, depending on ambient conditions
- Repairable by cutting away and pouring new material
- Protects against dust and dirt, and helps minimize the risk of arcing
- Flexibility of cured material helps absorb cable movement, and contributes to maintained integrity of the connection.
- Retains elastomeric properties at continuous temperature range of -54 to +204°C, and up to 260°C for short periods

Typical Physical Properties

Uncured Properties	Flit Plug Encapsulant	Catalyst (CE62-R)
Appearance	Light Gray	Red
Mixing Ratio (by weight)	100	2
Viscosity (after mixing) (23°C) Pa.s {P}		9.2 {92}
Pot Life (23°C) ¹ min		10
Cured Properties		
Appearance		Light Pink
Specific Gravity (23°C)		1.18
Hardness (Type A)		39
Tensile Strength MPa {kgf/cm ² }		1.6 {16}
Elongation %		170
Volume Resistivity Ω.cm		1.0 X 10 ¹⁴
Dielectric Strength KV/mm		24
Dielectric Constant (60Hz)		3.6
Dielectric Loss (60Hz)		0.03

¹ Pot Life based on elapsed time to achieve 2 times initial viscosity

Typical property data values should not be used as specifications.

At GE Advanced Materials — Silicones, our versatile materials are the starting point for our creative approach to ideas that help enable new developments across hundreds of industrial and consumer applications. We are helping customers solve

product, process, and performance problems; our silanes, fluids, elastomers, sealants, resins, adhesives, urethane additives, and other specialty products are delivering innovation in everything from car engines to biomedical devices. From

helping to develop safer tires and keeping electronics cooler, to improving the feel of lipstick and ensuring the reliability of adhesives, our technologies and enabling solutions are at the frontline of innovation.



GE imagination at work

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Mixing

Flit Plug Encapsulant is pre-packaged in containers to achieve the recommended mixing ratio (A:B) of 100:2. The entire contents of the B-Component (CE62-R catalyst) contained in 120g bottles, should be added to the A-Component (TSE352), packaged in 5.9kg cans. With clean tools, thoroughly mix the components, carefully scraping the sides and bottom of the can to produce a homogenous mixture.

Agency Certification

- Electrical equipment for coals mines-Insulating materials
- AS 1147.1-1989, Part 1: Materials
- Electrical apparatus for explosive gas atmospheres
- AS/NZS 60079.0:2005, General Requirements
- AS/NZS 60079.18:2005, Encapsulation 'm'

Handling and Safety

- Wear eye protection when handling uncured rubber as it can irritate the eyes. In case of eye contact, immediately flush eyes well with water and contact a physician.
- Adequate ventilation must be maintained in the work place at all times.
- Extended contact with the skin may cause irritation and should be avoided.

Storage

- Store in a dark, cool place out of direct sunlight.
- Keep out of reach of children.

Shelf Life

12 months from date of manufacture

Packaging

- Flit Plug Encapsulant (part A): 5.9 kg steel can
- CE62-R (part B): 120g bottle

Local Contacts

Regional Information	Phone	Fax
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