



Heat Defender™ FR27TC

General Description

This product is a thermally conductive, flame retardant gel suitable for removing heat from battery pack assemblies.

Performance in Battery Assemblies

FR027TC has been modified to be thermally conductive and can pull heat away from the cells during normal operation. It's low viscosity allows it to easily fill and cover non-uniform parts. If a thermal run-away event were to occur, FR027TC will resist intense heat and can self extinguish after several minutes flame exposure.

Processing

Gel may be pumped with the usual metering pump devices at room temperature (cold filling technology). Constant quality ensures high-speed, trouble-free production.

Health, Safety Precautions and Identification

FR027TC was tested according to EU recommendations 83/467/EEC and 84/449/EEC and found to be:

- non toxic
- non irritant to eyes
- non irritant to skin
- non nutritive to fungus

Good personal hygienic practice should be used, and prolonged contact with skin should be avoided. Based on our current knowledge and available information, FR027TC does not pose any acute or chronic health risks.

For further information, please refer to the Safety Data Sheet.

Packaging

20 kg pail	top internal diameter	328 ± 1 mm
	bottom internal diameter	312 ± 1 mm
	height	383 ± 1 mm
170 kg ribbed drum	internal diameter	571 ± 3 mm
	height	875 ± 5 mm
170 kg straight-sided drum	internal diameter	571 ± 3 mm
	height	885 ± 5 mm
850 kg returnable (IBC) container	length x width x height	1,200 x 1,000 x 1,185 mm
850 kg disposable lined container	length x width x height	1,200 x 1,000 x 1,400 mm

Other container types and sizes such as plastic or stainless steel can be tailored to customer requirements based on quantities and location.

Storage Information

Protect from moisture; storage life several years.



Heat Defender™ FR27TC

Characteristics

Density (20°C) ASTM D1475	1.70	g/cm ³
Flash Point DIN EN ISO 2592,ASTM D92	> 290	°C
Viscosity DIN 53019 (20 s ⁻¹ , 25°C)	10,500± 1,000	mPa•s
Yield Stress (by means of flow curve) 60°C	> 30	Pa-s
Volatiles (by weight) 80°C/24 hrs	< 0.1	%
Oxidation Induction Time ASTM D3895	> 50	min
Oil Separation (FTM 791.C) 120°C/24 hrs	0	%

Compatibilities

O. F. Coating	Compatible with O. F. coatings (UV Acrylate) commonly used in optical fiber cables
PET, PBT, PA, PC	Compatible with thermoplastic materials commonly used in optical fiber cables
PE	To be checked by the cable manufacturer; results are greatly influenced by material type

This Technical Information reflects the current knowledge, and is designed to inform and advise. Info-Gel assumes no liability for correctness. Modifications may be made in the interest of technical improvement.



For additional information:

Info-Gel LLC
231 I Distribution Center Drive Suite F
Charlotte, NC 28269 USA
T: +1 704 599 5770
F: +1 704 599 4399

Sales/Technical inquiries:
Info-Gel Sales Email:
sales@info-gel.com

Info-Gel is a member of The Stewart Group of companies.