



3M™ Flame Barrier FRB-NT127

Data Sheet

April 2025

Product Description	3M™ Flame Barrier FRB-NT127 is flexible insulation for OEM electrical flame barrier applications.
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| Product Features | <ul style="list-style-type: none"> • An inorganic-based, halogen-free* material • UL 94 V0, 5VA flame rating (UL File E65069) • Good dielectric strength • Good convertibility - material is easily slit, cut, formed and die cut • Good compatibility with various adhesives |
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*Halogen Free defined as both 1) no halogen compounds are intentionally added to the product or used in the manufacturing process for the product and 2) any impurities present are less than 900 ppm bromine, less than 900 ppm chlorine, and/or less than 1500 ppm total bromine and chlorine. The latter are the levels set forth in certain industry standards, such as the International Electrotechnical Commission (IEC) 61249-2-21 standard.

Properties

Note: Automotive Manufacturing, Design, and Quality Disclaimer. This product does not fully adhere to all typical automotive design or quality system requirements, such as IATF 16949 or VDA 6.3. This product may not be manufactured in an IATF certified facility. Values are not to be used for specification purposes. Cpk calculations for properties may be made once specification is established for specific application. Customer is solely responsible for evaluating the product and determining whether it is appropriate and suitable for customer’s automotive application and for conducting incoming inspections before use of the product. Failure to do so may result in injury, death, and/or harm to property.

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Physical Properties	Test Method	Value Imperial (Metric)
Nominal Thickness	ASTM D-645	5 mil (0.127 mm)
Basis Weight	ASTM D-202	0.36 lb/yd ² (195 g/m ²)
Tensile Strength, MD	ASTM D-828	31 lb/inch (54 N/cm)
Electrical Properties		Value
Dielectric Breakdown Voltage	ASTM D-149	2.7 kV
Comparative Tracking Index ¹	ASTM D3638	PLC 0
Other Properties		Value
Flame Rating ¹	ANSI/UL 94	V-0, 5VA

The technical information and data in this table should be considered representative or typical only and should not be used for specification purposes.

Notes:

1. UL QMFZ2/E65069 assigned rating

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Regulatory	For Regulatory information including RoHS, REACH, please visit www.3M.com/regs The above information represents 3M's knowledge and belief which may be based in whole or in part on information provided by 3rd party suppliers to 3M.
Shelf Life & Storage	This product has a 5-year shelf life (from date of manufacture) when stored in humidity controlled storage (50°F/10°C to 80°F/27°C and <75% relative humidity).
Availability	For availability, please contact your local distributor. Names and addresses are available from www.3M.com/oem or call 1-800-676-8381.

Intended Use: These products are intended for use within a high voltage lithium-ion battery pack to help address the spread of heat that occurs during thermal runaway propagation in automotive, off-highway, industrial and marine battery applications. Since there are many factors that can affect a product's use, the customer remains responsible for determining whether the 3M product is suitable and appropriate for the customer's specific application and system, including customer conducting an appropriate risk assessment and evaluating the 3M product in customer's application and system.

Restricted Use: 3M advises against the use of this 3M product in any application other than the stated intended use(s), since other applications have not been evaluated by 3M and may result in an unsafe or unintended condition.

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Product Selection and Use: Many factors beyond 3M's control and uniquely within user's knowledge and control can affect the use and performance of a 3M product in a particular application. As a result, customer is solely responsible for evaluating the product and determining whether it is appropriate and suitable for customer's application, including conducting a workplace hazard assessment and reviewing all applicable regulations and standards (e.g., OSHA, ANSI, etc.). Failure to properly evaluate, select, and use a 3M product in accordance with all applicable instructions and with appropriate safety equipment, or to meet all applicable safety regulations, may result in injury, sickness, death, and/or harm to property.

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