

FyreWrap® LT Marine Blanket – Navy N30 System

Introduction

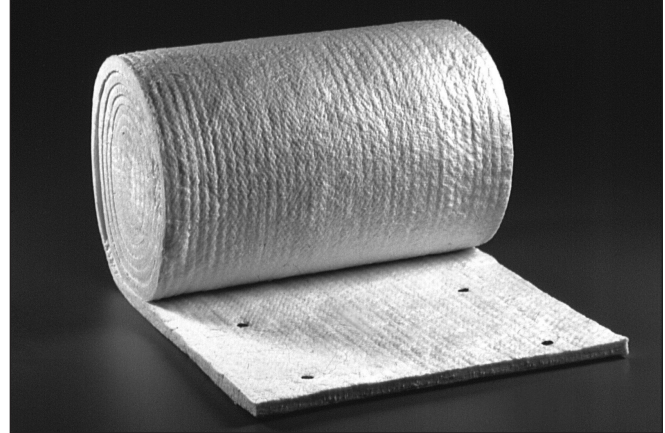
Unifrax offers high-temperature insulation blankets for U.S. Navy (steel) and SOLAS (steel and aluminum) structural fire-resistant divisions. FyreWrap® LT Marine Blanket is specifically developed for space- and weight-sensitive applications, and therefore provides effective solutions for military vessels and offers an N30 fire rating on steel divisions.

The Alkaline Earth Silicate (AES) chemistry is designed to enhance the material's biosolubility and meets the European regulatory requirement (Directive 97/69/EC). The proprietary fiber spinning technology utilized in the manufacture of FyreWrap LT Marine Blanket results in a material with high tensile strength, superior thermal and acoustical properties and optimized insulation performance. Mechanical needling of the fibers eliminates the need for binders in the product so the product does not smoke or flame under fire conditions. FyreWrap LT Marine Blanket is also chemically stable, and its thermal properties are unaffected after limited exposure to water and subsequent drying.

FyreWrap LT Marine Blanket provides structural insulation for a variety of fire-resistant divisions on naval surface ships. It is specifically designed to withstand the severe conditions of a hydrocarbon fuel fire, and limits fire penetration and heat transfer through the structural division. Thin, lightweight systems combined with a flexible product form result in lower installation costs and system weight savings.

FyreWrap LT Marine Blanket provides the following product features:

- Naval Sea Systems Command Approved
- N30 Fire Rating on Steel Divisions
- Manufactured in the USA
- Complies with MIL-PRF-32161
- Complies with MIL-STD-3020, Dept. of Defense Standard Practice Fire Resistance of Naval Surface Ships, Appendix A, Method of Fire Tests for Fire Resistance of Bulkheads and Decks



Applications

FyreWrap LT Marine Blanket can be utilized to insulate structural bulkheads and decks on military marine surface vessels. Typical applications include:

- Mission Bay
- Galley
- Cargo Areas
- Fire Zone Divisions

Typical Product Properties

| | |
|---------------------|---|
| Color | White |
| Melting Point | 2390°F (1310°C) |
| Temperature Grade | 2300°F (1260°C) |
| Rec. Operating Temp | 2012°F (1100°C) |
| Specific Heat | 1000j/kgk (1000°C) |
| Specific Gravity | 2.67 (g/cm ³) |
| Noncombustible | 2010 IMO FTP Code Part 1: IMO 1182 |
| Spread of Flame | ASTM E84 Flame Spread = 0 Smoke Development = 0 |
| R-Value (ASTM C518) | 4.2 per inch |
| K-Value (ASTM C518) | 0.240 BTU-in/hr-ft ² -°F |

Data are average results of tests conducted under standard procedures and are subject to variation. Results should not be used for specification purposes.

Product Forms

| | |
|---------------------|---|
| Thickness (nominal) | 1.0" (25mm) |
| Density (nominal) | 6 lbs/ft ³ (96 kg/m ³) |
| Dimensions | 24"x25' (610mm x 7620mm) |
| Part Number (PN)* | 768126000 |
| Facings | Available from others |

*PN for un-faced 1"x24"x25'. Contact Unifrax for PNs on other sizes.

For minimum order quantities, material lead time and availability of nonstandard thickness or widths, contact our Customer Service Department at 716-768-6500.

Installation

Refer to the U.S. Navy Approval List of N-Class Fire Resistant Divisions for details on fire ratings, material components and weights of qualified FyreWrap LT Marine Blanket systems. Refer to the U.S. Navy Approval Letter(s) for additional details on installation requirements and techniques.

The blanket's light weight and flexibility make installation easy and efficient. The system utilizes commercial off-the-shelf components and tools.

Refer to the product Safety Data Sheet (SDS) for recommended work practices and other product safety information.

Health and Safety Information

FyreWrap LT Marine Blanket from Unifrax, according to Directive 97/69/EC, possesses a fiber chemistry within the regulatory definition of a "man-made vitreous (silicate) fiber with random orientation with alkaline oxide and alkaline earth oxide content greater than 18% by weight." LT fibers have been tested pursuant to EU protocol ECB/TM/26, Revision 7, Nota Q, Directive 97/69/EC, with results that are below regulatory thresholds. As a result, FyreWrap LT Marine Blanket does not require additional labeling or further testing. Refer to the product Safety Data Sheet (SDS) for recommended work place practices and other product safety information.



These products offer solutions in applications such as:

- Grease, HVAC Ducts
- Cable Trays, Conduits
- Control System Covers
- Above Ground Storage Tanks
- Marine Bulkheads, Decks
- Structural Steel
- Construction Joints
- Curtain Walls/Safing
- Circuit Protection
- Railroad Tank Cars
- Transit Cars
- Ships
- Expansion Joints
- Fire Door Seals
- Chimney Liners
- Ceiling Air Diffusers
- Hazardous Material Storage Containers

Unifrax has a wide range of FyreWrap fire protection materials available to provide passive fire protection solutions in a variety of applications in the commercial building, industrial facility and transportation industries.

For additional information about product performance or to identify the recommended product for your fire protection application, please contact the Unifrax Customer Service Department at 716-768-6500 and ask for the Fire Protection Application Engineering Group.

FyreWrap®

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The test data shown are average results of tests conducted under standard procedures and are subject to variation. Results should not be used for specification purposes. Product Information Sheets are periodically updated by Unifrax. Before relying on any data or other information in this Product Information Sheet, you should confirm that it is still current and has not been superseded. A Product Information Sheet that has been superseded may contain incorrect, obsolete and/or irrelevant data and other information.

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