Unifrax is a leading producer of high temperature insulation products for a wide range of industrial applications. Our company was formerly part of The Carborundum Company, a leading manufacturer of abrasive and refractory products where ceramic fiber was invented in 1942 and trademarked under the Fiberfrax® name. Since that time, Unifrax high temperature fiber insulation products have been providing innovative heat management solutions in the ferrous and non-ferrous metals, industrial chemicals, petroleum products, power generation, ceramic, glass, automotive, fire protection, aerospace, appliance and other industries. Today, Unifrax is an expanding global company with 15 manufacturing facilities in 10 countries including China and eastern Europe, offering easy access to a full range of products, as well as worldwide engineering support.

Unifrax is committed to solving high temperature application problems and providing exceptional value to our customers. This commitment is evident in our broad product offering of over 50 product forms including bulk fiber, blankets, boards, modules, papers and felts, woven textiles, ropes and braids, coatings and mixes and accessory products. Our product line includes:

**Fiberfrax® Ceramic Fiber Products.**
Manufactured from a range of chemistries based on alumina-silica materials capable of withstanding continuous operating temperatures up to 1343°C (2450°F). These materials exhibit characteristics such as high temperature stability, low thermal conductivity, low heat storage, excellent thermal shock resistance, light weight and superior corrosion resistance.

**Insulfrax® Thermal Insulation Products.**
Based on calcium, magnesium, silica chemistry capable of withstanding temperatures up to 1000°C (1832°F) for continuous service in the petrochemical industry.\(^{(1)}\)

**Isofrax® Thermal Insulation Products.**
Utilize a unique, patented silica-magnesia chemistry capable of withstanding continuous operating temperatures up to 1260ºC (2300°F).

Insulfrax and Isofrax soluble fiber products are designed to have enhanced in-vitro solubility characteristics which enable these products to meet European regulatory requirements for synthetic vitreous fibers.

Unifrax high temperature insulation linings provide rapid installation to minimize turn-around time in many applications in the petrochemical and process industries. High temperature resistance provides long-term lining reliability, and the excellent insulation properties of Unifrax insulation materials reduce energy consumption. Our long-term experience, comprehensive product line, worldwide manufacturing and sales capabilities, and quality engineering and technical support make Unifrax a premier provider of high temperature solutions for chemical process industries wherever they are located in the global market.

\(^{(1)}\) For intermittent use up to 1100°C.
Typical Applications of Unifrax Products In A Furnace/Fired Heater
Unifrax Products For Chemical Process Industries

Unifrax products offer excellent thermal physical properties for chemical process industries including:
- Low thermal conductivity
- Excellent thermal stability
- Low heat storage
- Resistance to thermal shock
- Chemical stability
- Light weight
- Good sound absorption
- Resilience

Floor
- Insulating castables
- Dense castables
- Insulating firebrick
- Duraboard products
- Excelfrax Microporous Insulation
- Vacuum-formed burner surrounds

Convection Section/Stack
- Anchor-Loc® & Anchor-Loc2® modules
- Durablanket® products
- Duraboard® products
- Corbel shapes
- Insulating castables
- Insulating firebrick
- Excelfrax® Microporous Insulation

Radiant Arch
- Anchor-Loc & Anchor-Loc2 modules
- Durablanket products
- Duraboard products
- Insulating castables
- Insulfrax/Isofrax modules
- Excelfrax Microporous Insulation
- Vacuum-formed burner blocks

Radiant Walls
- Anchor-Loc & Anchor-Loc2 modules
- Durablanket products
- Duraboard products
- Insulating firebrick
- Insulfrax/Isofrax modules
- Vacuum-formed peepsites
- Vacuum-formed burner blocks
- Vacuum-formed burner surrounds
- Excelfrax Microporous Insulation

Vacuum-formed burner surrounds
Engineered Solutions For Chemical Process Industries

Anchor-Loc® Modules
- Designed for a wide range of application requirements in a variety of heat processing vessels.
- Compatibility with mastic coatings, backup insulation and foil vapor barriers.
- Module design compensates for variations in stud placement.
- Access to the welded fastener for full testing before the module is installed.
- Faster temperature cycling, lower heat storage, lower fuel costs and increased productivity.

Burner Blocks & Vacuum-Formed Products
- Fiberfrax windows, door plugs, burner blocks and burner surrounds complement the performance of a ceramic fiber or soluble fiber furnace lining.
- Burner blocks and furnace shapes are manufactured with a range of ceramic, polycrystalline and soluble fibers for applications at temperatures up to 1500°C.
- Features of all vacuum-formed furnace components include low weight, thermal efficiency and thermal shock resistance.
- Unifrax burner blocks and vacuum-formed components have been in use in hundreds of units all over the world for over ten years.

Specialty Products & Foamfrax® Insulation
- A wide range of Fiberfrax Coatings are available to protect the hot face surface of a ceramic fiber lined heater or pyrolysis furnace.
- Fiberfrax Pumpable products may be applied thru the furnace casing to eliminate hot spots resulting from deterioration of the refractory backup lining.
- Foamfrax® Insulation is a proprietary pneumatically applied insulation for heaters, pyrolysis furnaces, boilers and duct work.
- Foamfrax installs fast, resulting in quick unit turnarounds.
- Foamfrax insulation is available in a range of chemistries and compositions. The product is suited for installation as a full thickness lining, backup lining, or a veneer over existing fiber or refractory systems.

Fire Protection Products
- FyreWrap® Cable Insulation provides a flexible fire protective enclosure around cables and conduits.
- Products maintain electric circuit integrity during exposure to hydrocarbon fires.
- System is FM Global approved and meets ASTM E-1725 and ASTM E-1529.
- Complies with API and Exxon Mobil specifications for fireproofing cable trays and conduit.
- Product features a bio-soluble fiber core and encapsulating scrim covering for ease of handling and strength.
Unifrax Worldwide Locations

For more information on Unifrax products and services for chemical process industries contact the Unifrax location nearest you. Contact information for all our worldwide locations is available at www.unifrax.com.

Unifrax quality products for chemical process industries can be sourced from the following manufacturing locations:

New Carlisle, IN USA
Vinhedo, Brazil
Valencia, Venezuela
Thomastown, Australia
Lorette, France
Rainford, England
Lakhtar, India
Suzhou, China
Dubí, Czech Republic

Corporate Headquarters USA
Unifrax I LLC
2351 Whirlpool Street
Niagara Falls, NY 14305-2413
Telephone: 716-278-3800
Telefax: 716-278-3900

European Headquarters
Unifrax France, SA
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Telephone: +33 (0) 4 77 73 98 25
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