



MATERIAL SAFETY DATA SHEET

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Trade Name: FB 97 HEAT SHIELD

Manufacturer/Supplier: Unifrax Corporation
2351 Whirlpool St.
Niagara Falls, NY 14305-2413

Product Stewardship Information Hotline
1-800-322-2293 (Monday - Friday 8:00 a.m. - 4:30 p.m. EST)

CHEMTREC Assist: 1-800-424-9300

Effective Date: 04/22/1999 Supersedes: N. App. Print Date: 06/10/2003

2. COMPOSITION / INFORMATION ON INGREDIENTS

This product contains fire resistant paper encapsulated between layers of stainless steel and aluminized polypropylene scrim. It is an "article" within the meaning of the OSHA Hazard Communication Standard (29 CFR 1910.1200 (c)). Under normal conditions of handling and use, the inner paper is not sufficiently disturbed as to release more than minute or trace amounts of chemicals.

3. HAZARDS IDENTIFICATION

When the integrity of the encapsulation remains intact, this product presents little or no hazard. If the encapsulation material is altered, sharp edges can cut unprotected skin. Further, if the encapsulation is compromised, and sufficient mechanical energy is applied to the inner paper, exposure hazards may occur. Refer to section 16 for more information.

4. FIRST AID MEASURES

No first aid measures are necessary.

5. FIRE FIGHTING MEASURES

This product is non-combustible.

6. ACCIDENTAL RELEASE MEASURES

See section 16 for information.

7. HANDLING AND STORAGE

If product is cut, wear protective gloves to avoid skin lacerations from exposed edges.

Avoid storing with sharp edges exposed.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

No significant exposures from encapsulated product.

9. PHYSICAL AND CHEMICAL PROPERTIES

Odor and Appearance:	PAPER BETWEEN LAYERS OF FOIL AND SCRIM		
Chemical Family:	NA		
Boiling Point:	NA	% Solubility in Water:	NA
Melting Point:	1760° C	Specific Gravity:	NA
Vapor Pressure:	NA	pH:	NA
Vapor Density (Air = 1):		NA % Volatile:	NA
Molecular Weight:	NA	Molecular Formula:	NA

10. STABILITY AND REACTIVITY

CHEMICAL STABILITY: Stable under conditions of normal use.

INCOMPATIBILITY: None.

CONDITIONS TO AVOID: None.

HAZARDOUS DECOMPOSITION PRODUCTS: None.

HAZARDOUS POLYMERIZATION: Not Applicable.

11. TOXICOLOGICAL INFORMATION

No adverse health effects are expected from use of the encapsulated product.

12. ECOLOGICAL INFORMATION

No ecological concerns have been identified.

13. DISPOSAL CONSIDERATIONS

This product is not classified as a hazardous waste according to Federal regulations (40 CFR 261). Check local, regional, state or provincial regulations for applicable requirements for disposal. Any processing, use, alteration or chemical additions to the product, as purchased, may alter the disposal requirements. Under Federal regulations, it is the waste generator's responsibility to properly characterize a waste material, to determine if it is a "hazardous" waste.

14. TRANSPORT INFORMATION

U.S. DEPARTMENT OF TRANSPORTATION (DOT)

BILL OF LADING DESCRIPTION (49 CFR 172.202): FB 97 HEAT SHIELD (NON-REGULATED)

UNITED NATIONS (UN) NUMBER: NOT APPLICABLE

NORTH AMERICA (NA) NUMBER: NOT APPLICABLE

15. REGULATORY INFORMATION

This product contains a fire resistant paper encapsulated between layers of stainless steel and aluminized polypropylene scrim. The encapsulated mat includes refractory ceramic fiber (RCF), a material regulated in some jurisdictions. Key statutory and regulatory classifications or listings for the product, as manufactured, which may impact product storage, use, handling or disposal:

U.S. FEDERAL REGULATIONS

Comprehensive Environmental Response Compensation and Liability Act of 1980 (CERCLA):

Constituents regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA 40 CFR 302):

<u>Constituent</u>	<u>RQ in Pounds</u>
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Most RCF products, including this product, are composed of RCF with an average diameter greater than 1 micron, and therefore are not considered CERCLA hazardous substances. See 60 FR 30934 (June 12, 1995).

Clean Air Act (CAA):

Substances regulated as hazardous air pollutants under Section 112 of the Clean Air Act Amendments of 1990:

<u>Chemical Name</u>

Most RCF products, including this product, are composed of RCF with an average diameter greater than 1 micron, and therefore are not considered hazardous air pollutants. See 60 FR 30934 (June 12, 1995).

Toxic Substances Control Act (TSCA):

All substances in this product are listed, as required, on the TSCA inventory. Refractory ceramic fiber has been assigned a CAS number; however, it is a simple mixture and therefore not required to be listed on the TSCA inventory. The components of RCF are listed on the inventory.

This product contains refractory ceramic fiber and is subject to an EPA TSCA Section 5(e) Consent Order and may be subject to TSCA Section 12(b) Export Notification requirements. Monitoring of airborne workplace fiber concentrations is being conducted under the consent order. For more information on this program, contact the Unifrax Corporation Product Stewardship Information Line at 1-800-322-2293 (See Section 16).

Superfund Amendments and Reauthorization Act (SARA) Title III Information:

SARA Hazard Category:

Listed below are the hazard categories for the Superfund Amendments and Reauthorization Act (SARA) Section 311/312 (40 CFR 370):

Immediate Hazard: --	Reactivity Hazard: --	Fire Hazard: --
Delayed Hazard: X	Pressure Hazard: --	

SARA 313 Information:

Toxic chemical(s) subject to the annual reporting requirements of the Superfund Amendments and Reauthorization Act (SARA) Section 313 (40 CFR 372):

<u>Chemical Name</u>	<u>CAS Number</u>
<u>Concentration</u>	

EPA has proposed to place man-made mineral fibers, including RCF, on the list of substances subject to the annual TRI reporting requirements, but a final listing decision has been deferred indefinitely. See 59 FR 61439 (November 30, 1994).

SARA 302/311/312 Information:

Extremely hazardous substances subject to the notification and inventory reporting requirements of the Superfund Amendments and Reauthorization Act (SARA) Section 302 (40 CFR 355) and Section 311/312 (40 CFR 370) respectively:

<u>Chemical Name</u>	<u>CAS Number</u>
<u>Concentration</u>	

STATE REGULATIONS

California:

Substance(s) listed by the State of California on Proposition 65, the Safe Drinking Water and Toxic Enforcement Act of 1986:

<u>Chemical Name</u>	<u>CAS Number</u>
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New Jersey:

Chemical(s) which are listed as a special health hazard substance as defined in New Jersey Worker and Community Right to Know Act, New Jersey Administrative Code, Title 8, Department of Health, Chapter 59, Subchapter 10:

<u>Chemical Name</u>	<u>CAS Number</u>
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Pennsylvania:

Chemical(s) which are listed as a special health hazard substance as defined in Pennsylvania Right-to-Know Law, Section 3800:

<u>Chemical Name</u>	<u>CAS Number</u>
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INTERNATIONAL REGULATIONS

Canadian Workplace Hazardous Materials Information System (WHMIS):

The following Canadian Workplace Hazardous Materials Information System (WHMIS) categories apply to this product:

Compressed Gas: -- Flammable/Combustible: -- Oxidizer: --
 Acutely Toxic: --
 Other Toxic Effects: X Biohazardous: -- Corrosive: ---
 Dangerously Reactive: --

Canadian Environmental Protection Act (CEPA):

All substances in this product are listed, as required, on the Domestic Substances List (DSL).

Chemical(s) which are listed on the Non-Domestic Substances List:

<u>Chemical Name</u>	<u>CAS Number</u>
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16. OTHER INFORMATION

This product is an article pursuant to the OSHA Hazard Communication Standard (29 CFR 1910.1200 (c)). Under normal conditions of handling and use, the encapsulated product is not expected to release any amount of hazardous chemicals.

If the integrity of encapsulation is disturbed, and sufficient mechanical energy is applied to the inner paper, exposure to airborne particulate and refractory ceramic fiber (RCF) may result. As RCF has been classified as a potential human carcinogen, additional precautionary measures should be taken to control exposure to airborne fibers and particulate. For more details, please contact the Product Stewardship

Information line (see below) to obtain an MSDS for Fiberfrax® High Purity Papers (M0055).

Product Stewardship Program

The Unifrax Corporation has established a program to provide customers with up-to-date information regarding the proper use and handling of refractory ceramic fiber. In addition, Unifrax Corporation has also established a program to monitor airborne fiber concentrations at customer facilities. If you would like more information about this program, please call the Unifrax Corporation Product Stewardship Information Hotline at 1-800-322-2293.

Revision Summary:

MSDS Prepared By: UNIFRAX RISK MANAGEMENT DEPARTMENT

DISCLAIMER

The information presented herein is based on data considered to be accurate as of the date of preparation of this Material Safety Data Sheet. However, no warranty or representation, express or implied, is made as to the accuracy or completeness of the foregoing data and safety information. In addition, no responsibility can be assumed by vendor for any damage or injury resulting from abnormal use, from any failure to adhere to recommended practices, or from any hazards inherent in the nature of the product.



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Official Unifrax High Temperature Insulation Website	http://www.unifrax.com
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Unifrax Refractory Ceramic Fiber Information	http://www.refractory-ceramic-fiber.com
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