

MATERIAL SAFETY DATA SHEET

The following form is intended to contain all information as required by the standards and regulatory requirements of the United States and may not meet regulatory requirements of other countries.

STYLE 702 AKII GRAPHITE FILAMENT/PTFE FINISHED PACKING

This form also covers **Style 702SC, Style 702AF**

SECTION I: COMPANY INFORMATION

Manufactured by:
New England Braiding Company, Inc.
Address:
610 Gold Street
Manchester, New Hampshire 03103
Revised by: L. Finnegan

Emergency Telephone
603-669-1987
Telephone # for Information
603-669-1987
Date Revised: 07/01/05
Complete revision

SECTION II: HAZARDOUS INGREDIENTS / IDENTITY INFORMATION

Hazardous Components: None anticipated under intended conditions of use.

The following is provided for informational purposes only, since it applies to respirable dust only.

Graphite: CAS #7782-42-5 OSHA PEL: 2.5mg/m³ ACGIH TLV: 2.5mg/M³

Note: This product is essentially inert in all intended uses up to 500°F (260°C); **however**, it should **NOT** be used in contact with tobacco or tobacco products and hands should be washed after handling this product prior to smoking. See Sec. V.

Identity: Referenced packing is manufactured from a high purity (98%+ continuous multifilament graphite yarn incorporating a proprietary finish sizing/binder that does not exceed 17 % by weight. The finish contains a blend of graphite flake bound in polytetrafluoroethylene (PTFE). Style 702SC incorporates Silicone cord stock in its construction. Style 702AF incorporates AFLAS[®] cord stock.

SECTION III: PHYSICAL/CHEMICAL CHARACTERISTICS

Boiling Point: N/A

Vapor Pressure (mm Hg.): N/A

Vapor Density (air=1): N/A

Solubility in Water: Insoluble

Appearance: Style 702 shiny gray/black braided solid Style 702SC includes red cord stock fill and Style 702AF includes black cord stock fill.

Specific Gravity (H₂O=1): 1.2

Melting Point: N/A

Evaporation. Rate: N/A

Odor: No odor

SECTION IV: FIRE AND EXPLOSION HAZARD DATA

Flash Point (Open Cup): N/A

Flammable Limits: N/A

Extinguishing Media: CO₂, dry chemical, foam, Halon, water

Special Fire-Fighting Procedures: Use self-contained breathing apparatus (SCBA) to protect against decomposition gasses that evolve from binders and graphite particles in smoke.

MSDS Styles 702, 702SC, 702AF

Unusual Fire & Explosion Hazards:

Material does not support combustion but thermal decomposition of PTFE in the binder begins above 550°F (288°C) and may produce toxic gases including but not limited to carbon dioxide, nitrogen oxides and aliphatic hydrocarbons.

SECTION V: REACTIVITY DATA

Stability: Stable at normal temperature and storage conditions

Conditions to Avoid: Do **NOT** incinerate. Avoid oxidizers.

Polymer—Overheating (>300°C or 572°F) may create thermal decomposition products that could result in irritation of the mucous membranes, eyes, skin, respiratory tract, or polymer fume fever. Polymer fume fever is a temporary flu-like illness with fever and chills of approximately 24-48 hours duration.

Hazardous Decomposition or Byproducts: Trace amounts only of hydrogen fluoride gas and perfluorocarbon olefins may evolve over 752°F (400°C).

Hazardous Polymerization: Will not occur

SECTION VI: HEALTH HAZARD DATA

Health Hazards (Acute & Chronic): NONE - materials are essentially inert under normal conditions, however, smoking after handling may create conditions for "polymer fume fever". See Section V. Always wash hands after smoking.

Medical conditions generally aggravated by exposure: None known

Emergency & First Aid Procedures: In a fire, treat exposure to fumes for hydrogen fluoride exposure if irritation occurs. For "Polymer Fume Fever", treat as required by symptom.

SECTION VII: PRECAUTIONS FOR SAFE HANDLING

Steps to be Taken in Case Material is Released or Spilled: N/A

Waste Disposal Method: Do **NOT** incinerate. Not biodegradable. Dispose of used material in accordance with Federal, State, and Local regulation. Check service material was used in to determine if used material may have absorbed hazardous materials from service and thus require special handling.

Precautions to be Taken in Handling & Storing: Wash hands after handling, especially prior to smoking.

Other Precautions: Do **NOT** smoke or handle smoking materials while handling this product. Wash hands first. Thermal decomposition of polymer on smoking materials may cause "Polymer Fume Fever". See Section V above.

SECTION VIII: CONTROL MEASURES

Eye Protection: Wear safety glasses or coverall goggles when cutting or mechanically working this product, or when airborne dust may be present.

Respiratory Protection: Respiratory protection is not normally required under anticipated working conditions of use. Wear NIOSH/MISHA approved respiratory protection.

In case of fire, use self-contained breathing apparatus to prevent exposure to products of thermal breakdown. Cover exposed skin areas to prevent exposure to possible hydrogen fluoride gas. Wear NIOSH/MISHA approved respiratory protection that complies with OSHA Standard 29 CFR 1910.134

MSDS Styles 702, 702SC, 702AF

Ventilation: Local exhaust should be filtered and conditioned to eliminate respirable fibers, dust and fumes.

Other Protective Clothing or Equipment: As required for personnel during installation or removal by local plant practice. Consider personnel exposure to service fluid that may be absorbed by this material during use. **Work/Hygienic Practices:** Wash hands after handling. **DO NOT** smoke when handling. Wash hands before smoking. See Section V.

SECTION IX: FIRST AID MEASURES

Eye Contact: Flush eyes with plenty of water. Seek medical attention.

Ingestion: Not a plausible route.

Inhalation: If large amounts of fumes, dust or fibers are inhaled remove to fresh air. If persistent cough or other systems develop, seek medical attention.

THE INTENDED USE OF THIS PRODUCT MEETS THE DEFINITION OF AN ARTICLE UNDER 29 CFR 1910.1200.

The above data describes exclusively the safety requirements of the product and is based on our current base of knowledge. It does not relate to use in combination with other materials or in any process. No guarantee is expressed or implied.