

SAFETY DATA SHEET

SECTION 1. IDENTIFICATION

IDENTITY:

Part Number: 3R782

Identity: FGK FII AM

Description:

EGK FILAMENT PACKING

SUPPLIER:

Industries 3R Inc. 55, route 116 Ouest

Danville (Québec) JOA 1A0

Tel: 819-839-2793 *Fax:* 819-839-2797

SECTION 2. HAZARDS IDENTIFICATION

GHS Classification: Not classified as hazardous as defined by the GHS and OSHA 29 CFR 1910.1200.

Label Elements: None Required

SECTION 3. COMPOSITION / INFORMATION ON INGREDIENTS

Component	CAS#	Percentage
Polytetrafluoroethylene Resin	9002-84-0	20-70
Graphite	7782-42-5	10-30
Silicone Oil	63148-62-9	1-50
White Mineral Oil	8042-47-5	1-50
Aramid Fibers	26125-61-1	1-10
	25765-47-3	

SECTION 4. FIRST AID MEASURES

Eyes: Flush with plenty of water, especially under eyelids. Get medical attention if irritation persists.

Skin: No first aid should be needed. Get medical attention if irritation occurs and persists.

Inhalation: If irritation or other symptoms occur, remove to fresh air. Get medical attention if irritation or symptoms persist.

Ingestion: No adverse effects are expected. Consult a physician if large amounts are swallowed.

Most important symptoms/effects, acute and delayed: Dust may cause mechanical eye irritation. Prolonged skin contact may cause irritation or drying of the skin. Inhalation of dust may cause nose, throat and upper respiratory tract irritation.

Indication of immediate medical attention and special treatment: No immediate medical attention is required.

SECTION 5. FIRE FIGHTING MEASURES

Suitable (and unsuitable) extinguishing media: Use any extinguishing media that is appropriate for the surrounding fire.

Specific hazards arising from the chemical: Solid product will burn slowly under fire conditions. Thermal decomposition can yield carbon and nitrogen oxides, hydrogen fluoride, perfluoroisobutylene, hexafluoropropylene, carbonyl fluoride, tetrafluoroethylene, and aliphatic hydrocarbons.

Special Fire Fighting Procedures: Fight as any normal fire using self-contained breathing apparatus (SCBA) and full protective clothing where exposed to smoke.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment, and emergency procedures: None required under normal conditions of use.

Environmental hazards: Report spill as required by local and federal regulations.

Methods and materials for containment and cleaning up: Pick-up solid material for reuse or disposal. For dust that may be generated, collect with methods such as vacuuming or wet wiping, that minimizes the generation of airborne dust. Only vacuum using a HEPA filter equipped vacuum cleaner.

SECTION 7. HANDLING AND STORAGE

Precautions for safe handling: Avoid creation and inhalation of dust. Provide local exhaust ventilation at points where dust may be generated during cutting and processing. Do not use compressed air for cleaning. Follow good housekeeping procedures to minimize the accumulation of dust in the workplace.

Conditions for safe storage: No special storage required.

SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure guidelines:

Component	Exposure Limit/Source
Polytetrafluoroethylene Resin	None Established
Graphite	5 mg/m ³ TWA OSHA PEL (respirable), 15 mg/m ³ (total dust)
	2 mg/m ³ TWA ACGIH TLV (respirable)
Silicone Oil	None Established
White Mineral Oil	5 mg/m ³ TWA ACGIH TLV (Inhalable) (as mineral oil)
	5 mg/m3 TWA OSHA PEL (as oil mist)
Aramid Fibers	None Established

Definitions:

PEL means OSHA Permissible Exposure Limit.

TLV means American Conference of Governmental Industrial Hygienists (ACGIH) Threshold Limit Value.

TWA means time-weighted average.

STEL means short-term exposure limit.

Appropriate engineering controls: No special ventilation required for handling solid material. Local exhaust or process enclosures may be needed if dust is generated in processing.

Personal Protective Measurers:

Respiratory Protection: None required for handling solid material. If processing generates dust and engineering controls are not available to control the exposures, appropriate respiratory protection may be required. Selection of respiratory protection depends on the contaminant type, form and concentration. Select in accordance with OSHA 1910.134 and good Industrial Hygiene practice.

Skin Protection: None normally required. If dust is generated in processing, wear appropriate gloves.

Eye Protection: Follow facility requirements.

Other Protective Equipment: None normally required. Wear protective clothing in dusty environments.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance (physical state, color, etc.): Black braided yarn.

Odor: No odor.

Odor threshold: Not applicable	pH: Not applicable		
Melting point/Freezing point: Not applicable	Boiling point: Not applicable		
Flash point: Not applicable	Evaporation rate: Not applicable		
Flammability (solid, gas): Not applicable			
Flammable limits: LEL: Not applicable	UEL: Not applicable		
Vapor pressure: Not applicable	Vapor density: Not applicable		
Relative density: 1.3-2.0	Solubility: Insoluble in water		
Partition coefficient: n-octanol/water: Not applicable	Auto-ignition temperature: Not available		
Decomposition temperature: Not available	Viscosity: Not applicable		

SECTION 10. STABILITY AND REACTIVITY

Reactivity: Not reactive Chemical stability: Stable

Possibility of hazardous reactions: None known.

Conditions to avoid: Avoid open flames.

Incompatible materials: Avoid contact with strong oxidizers

Hazardous decomposition products: Thermal decomposition can yield carbon and nitrogen oxides, hydrogen fluoride, perfluoroisobutylene, hexafluoropropylene, carbonyl fluoride, tetrafluoroethylene, and

aliphatic hydrocarbons.

SECTION 11. TOXICOLOGICAL INFORMATION

The hazardous components in this product are not volatile and bound in a polymer matrix so exposure to these chemicals does not occur under normal handling conditions. Dust may be generated while cutting or processing.

Potential Health Effects:

Eye Contact: Dust may cause mechanical abrasion or injury.

Skin Contact: Prolonged contact may cause irritation and defatting of the skin.

Ingestion: No toxic effects are expected. Ingestion of large amounts may cause gastrointestinal irritation. **Inhalation:** Inhalation of dust may cause throat and upper respiratory tract irritation. Inhalation of thermal decomposition of polytetrafluoroethylene may cause polymer fume fever with symptoms of tightness in the chest, fever, cough, shortness of breath and weakness. Severe exposures may cause pulmonary edema.

Chronic Hazards: None expected.

Carcinogen: None of the components of this product are listed as a carcinogen by IARC, NTP or OSHA.

Acute Toxicity Data:

Polytetrafluoroethylene Resin: Oral rat LD50 >11,280 mg/kg

Graphite: Oral rat LD50>2000 mg/kg, Inhalation LC50 >2.0 mg/L/4 hr (no mortalities occurred)

Silicone Oil: Oral rat LD50 >5000 mg/kg, Inhalation rat LC50 >5 mg/L/4 hr, White Mineral Oil: Oral rat LD50 >5000 mg/kg, Inhalation rat LC50 >5 mg/L/4 hr,

Aramid Fibers: No toxicity data available

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity:

Polytetrafluoroethylene Resin: No data available

Aramid Fibers: No data available;

Graphite: 96 hr LC50 Danio rerio >100 mg/kg, 48 hr EC50 daphnia magna >100 mg/L, 72 hr EC50

Pseudokirchnerella subcapitata >100 mg/L

Silicone Oil: No data available

White Mineral Oil: 96 hr Oncorhynchus mykiss LL50 >100 mg/L, 48 hr LL50 daphnia magna >100 mg/L

Aramid Fibers: No data available:

Persistence and degradability: No data available.

Bioaccumulative potential: No data available. Not expected to bioaccumulate.

Mobility in soil: No data available.

Other adverse effects: The product is not expected to cause adverse effects to aquatic organisms.

SECTION 13. DISPOSAL CONSIDERATIONS

Waste Disposal Method: Dispose in accordance with all applicable local, state/provincial and federal regulations. Local regulations may be more stringent than regional and national requirements. It is the responsibility of the waste generator to determine the toxicity and physical characteristics of the material to determine the proper waste identification and disposal in compliance with applicable regulations.

SECTION 14. TRANSPORT INFORMATION

	UN Number	Proper shipping name	Hazard Class	Packing Group	Environmental Hazard
DOT		Not Regulated			

Transport in bulk (according to Annex II of MARPOL 73/78 and the IBC Code): Not applicable – product is transported only in packaged form.

Special precautions: None known.

SECTION 15. REGULATORY INFORMATION

Safety, health, and environmental regulations specific for the product in question.

EPA SARA 311 Hazard Classification: Not Hazardous

EPA SARA 313 Chemicals: This product contain the following chemicals listed under SARA 313: None

Hazardous Substance (40CFR 116) CERCLA: This product is not subject to CERCLA reporting requirements as it is sold. Many states have more stringent release reporting requirements. Report spills required under federal, state and local regulations.

California Proposition 65: This product contains the following chemicals known to the State of California to cause cancer and/or reproductive toxicity: None known

SECTION 16. OTHER INFORMATION

NFPA Hazard Rating: Health: 0 Fire: 1 Reactivity: 0

HMIS Hazard Rating: Health: 0 Fire: 1 Reactivity: 0

DISCLAIMER – The information provided in this Safety Data Sheet is based on our current knowledge. While the information and recommendations set forth herein are believed to be accurate, Industries 3R takes no warranty with respect thereto and disclaims all liability in reliance thereon. We recommend testing according to local conditions. The specifications are subject to change without notice.