

SAFETY DATA SHEET

Fluorinar-ESD™ PVDF

Poly(vinylidene fluoride-co-hexafluoropropylene)

EFFECTIVE DATE: 04 / 02 / 2019

REVISION NUMBER: V1.1



1 PRODUCT AND SUPPLIER INFORMATION

Product Identification:

Product Name: Fluorinar-ESD™ PVDF Filament
Chemical Name: Poly(vinylidene fluoride-co-hexafluoropropylene)

Recommended Use:

Additive Manufacturing

Supplier Information:

Nile Polymers
569 North 400 East
Centerville, UT 84014
Phone (801) 203-3756
Email: info@nilepolymers.com
Emergency Phone Number: (801) 203-3756

2 HAZARDS IDENTIFICATION

Regulation (EC) NO 1272/2008: Not classified as a dangerous product

Physical Hazards: None

OSHA Regulatory Status: This product is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

3 COMPOSITION/INFORMATION ON INGREDIENTS

Components: Poly(vinylidene fluoride-co-hexafluoropropylene)

CAS No.: 9011-17-0

Concentration Range (%): 80 - 99

Components: Graphene

CAS No.: 1034343-98-0

Concentration Range (%): 1 - 20

4 EMERGENCY FIRST AID

Eyes: Not likely due to the nature of the product. Flush with water. Consult physician if symptoms persist.

Skin Contact: Wash with soap and water. For thermal burns from molten polymer, immediately flush with cold water. Do not attempt to remove cooled polymer from skin. Obtain medical attention.

Inhalation: Leave exposed area and seek fresh air. If irritation persists seek medical attention.

Ingestion: Not likely due to nature of the product. If ingested, drink plenty of water. Do not induce vomiting. Consult a physician if symptoms persist.

5 FIRE AND EXPLOSION HAZARD

Extinguishing Media: Water spray, dry powder or foam.

Safety Precautions: Persons exposed to combustion products should wear NIOSH approved self-contained breathing apparatus and full protective equipment.

6 ACCIDENTAL RELEASE MEASURES

Spill or Release: Clean up by vacuuming or sweeping to prevent falls. If molten, allow material to cool and place into an appropriate container for disposal.

7 HANDLING AND STORAGE CONDITIONS

Handling and Storage Precautions: Keep filament sealed. Store in a dry environment.

Waste Disposal: Dispose in accordance with applicable federal, state and local regulations.

8 EXPOSURE AND PROTECTION INFORMATION

Exposure Limits: This product does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

Respiratory Protection: A NIOSH approved respiratory is recommended for protection against processing polymeric fumes or from dust generated from grinding, sanding, or sawing operations.

Ventilation: Local exhaust is preferred.

Protection Gloves: Canvas or cotton gloves are recommended.

Eye Protection: Safety glasses with side shields are recommended.

Other: No protective equipment is needed under normal use conditions.

9 PHYSICAL/CHEMICAL DATA

Form: Solid

Appearance: Black color

Odor: None

Freezing Point: N/A

Solubility in Water: Insoluble

Specific Gravity: >1

% Volatile: N/A

Boiling Range: N/A

Vapor Pressure (MM HG): Negligible

Melting Point: 130°-138°C

Note: This data is based on tested material but may vary from sample to sample. Typical values should not be construed as a guaranteed analysis of any specific lot or as specifications for the product.

10 STABILITY AND REACTIVITY

Polymerization Conditions to Avoid: None

Chemical Stability: Stable under normal conditions

Conditions to Avoid: None

Hazardous Decomposition Byproducts: Thermal decomposition above 290° C can yield carbonyl fluoride, carbon monoxide, carbon dioxide and hydrogen fluoride.

11 TOXICOLOGICAL INFORMATION

No specific toxicological information is available.

12 ECOLOGICAL INFORMATION

No specific ecological information is available.

13 DISPOSAL

Waste Disposal: Waste or unused product may be discarded in accordance with state, federal and local regulations.

14 TRANSPORT INFORMATION

Land Transport (DOT): Non-Regulated
Sea Transport (IMDG): Non-Regulated
Air Transport (ICAO/IATA): Non-Regulated

15 REGULATORY INFORMATION

TSCA: Complies
EINECS/ELINCS: N/A
DSL/NDSL: Complies
PICCS: N/A

ENCS: Complies
IECSC: Complies
AICS: Complies
KECL: Complies

16 MISCELLANEOUS INFORMATION

Prepared By: Business Management
Issued: 4/2/19
Supersedes: 3/24/19

This information set forth herein has been gathered from standard reference materials and supplier test data and is, to the best knowledge of Nile Polymers, accurate and reliable. Such information is offered solely for your consideration, investigation and verification. It is not guaranteed that the hazard precautions or procedures mentioned are the only ones which exist. Nile Polymers makes no warranties, expressed or implied, with respect to the use of such information. or the use of the specific material identified here in combination with any other material or process.

END OF SDS