Advanced Engineered Filaments

Safety Data Sheet

Original release date: October 10, 2016
Revised January 30, 2017

Purge Filament

Section 1 Product and Company Identification

Product name: Purge Filament
Description: Thermoplastic
Revision date: January 30, 2017.

Contact for Information/Manufacturer identification:

Advanced Engineered Filaments
2755 Lauzon Parkway
Windsor, Ontario,
N8T 3H5

Ph. (519) 944-9200 Ext. 1047

Section 2 Hazards Identification

2.1 Emergency Overview
HMOIS (US only): Helath 1, Fire Hazard 1, Reactivity 0
NFPA: Health 0, Flammability 0, Reactivity 0

2.2 OSHA Regulatory Status
All Ingredients are encapsulated by the polymer and not considered hazardous by the OSHA Hazards Communication Standard (29 CFR 1910.1200).

2.3 Potential Health Effects
Routes of entry for solids include eye and skin contact, ingestion and inhalation.
Refer to section 4 for First Aid Measures

2.4 Potential Environmental Effects
None Known.

Section 3 Composition/Information on Ingredients

This product does not contain chemicals that are considered Hazardous under OSHA 29 CFR 1910.1200

Section 4 First Aid Measures

Eyes: Flush with water. If irritation persists seek medical attention.
Skin: For thermal burns, immediately flush with cold water. Do not attempt to remove polymer from skin. Seek medical attention.
Inhalation: Leave exposed area an d seek fresh air. If irritation persists seek medical attention.
Ingestion: Do not induce vomiting. Seek medical attention.

Section 5 **Fire Fighting Measures**

Wear protective clothing and use self-contained breathing equipment. Extinguishing media to include water, foam, CO2 and dry chemical.

Section 6 **Accidental Release Measures**

Spilled material may cause a slip hazard. Vacuum or sweep material and place in a disposal container.

Section 7 **Handling and Storage**

Handling: See 8.3 personal Protective Equipment

Storage: Keep container closed to prevent contamination.

Section 8 **Exposure Guidelines**

8.1 This product does not contain chemicals that are considered hazardous under OSHA 29 CFR 1910.1200

Special characteristics or information: No special characteristics listed for this product.

8.2 **Engineered Controls**

Localized ventilation is recommended.

8.3 **Personal Protective Equipment**

Eyes: Safety Glasses

Hands: Cotton gloves for handing molten plastic.

Skin: Protective clothing for contact with molten plastic.

Respirator: Not required for 3D printing as product is stable.

Hygiene: Wash thoroughly after handling and before eating or drinking.

Section 9 **Physical and Chemical Properties**

Physical condition:	Solid Pellets
Odor:	Odorless at ambient temperature. Characteristic plastic odor during heating.
Melting Point Temp:	374°F (190°C)
Flash Point Temp:	644°F (340°C)
Auto Ignition Temp:	716°F (380°C)
Flammability (solid,gaseous)	Not reasonably applicable.
Min Limit of Explosion	Not reasonably applicable.
Max limit of Explosion	Not reasonably applicable.
Vapor pressure:	Not reasonably applicable.
Relative density:	0.5 – 1.5 g / ml.
Bulk density:	No data available.
pH Value:	Not reasonably applicable.
VOC Content:	Less than 5 parts per million.
Off-gassing:	Does not occur until temperatures in excess of 716°F (380°C) are reached. Well beyond typical processing conditions. Less than 0.01% of ash on complete combustion and the only gas produced is carbon dioxide. Does not meet the definition of a hazardous material as given in 29 CFR Part 1910.000 (OSHA).

Section 10 **Stability and Reactivity**

This product is stable and non-reactive. Hazardous decomposition of products can occur if overheated beyond 572°F (380C) or ignited.

Section 11 **Toxicology Information**

Based on our experience and the information available, no adverse health effected are expected if handled as recommended with suitable precautions for designated uses.

Section 12 **Ecological Information**

Refer to Section 6.

Section 13 **Disposal Considerations**

Preferred options for disposal are (1) recycling, (2) incineration with energy recovery, (3) landfill. Treatment, storage, transportation and disposal must be in accordance with applicable Federal, State/Provincial and Local regulations.

Section 14 **Transportation Information**

This product is ***not*** regulated under the following regulations:

- United State Department of Transportation (DOT)
- United States Coast Guard regulations.
- International Maritime Organization (IMO) regulations.
- International Civil Aviation Organization (ICAO) regulations.
- International Air Reports Association (IATA) regulations.
- Canadian Transportation of Dangerous Goods (TDG) regulations.
- European Agreement Concerning the International Carriage of Dangerous Good by Road (ADR) regulations.
- European Agreement Concerning the International Carriage of Dangerous Good by Rail (RID) regulations.
- Australian Dangerous Goods (ADG) regulations.

Section 15 **Regulatory Information**

Reference Section 3
All components of this product are on or exempt from listing on the US TSCA inventory and on Canadian DSL inventory.
SARA Title III reporting: Not Required.

Section 16 **Other Information**

Definitions
CAS = Chemical Abstract Number
DSL = Domestic Substance List
OSHA = Occupational Safety and Health Act.
PEL = Permissible Exposure Limit
TSCA = Toxic Substance Control Act
SARA = Superfund Amendments & Reclamation Act
VOC = Volatile Organic Chemical
N/E = Not Established.

These test results are based on reliable procedures. Due to variable conditions of fitness for a particular or methods of processing no guarantees or warrantees are expected or implied including warranty of fitness for a particular purpose. These are not product specifications, nor manufacturing minimums. Each user of the material should make appropriate tests to determine the suitability of the material for use.