Safety Data Sheet of Fiberlogy **ESD ABS** according to Regulation (EC) No. 1907/2006 (REACH) in the current version.

Date: December 19, 2018

1. **PRODUCT & COMPANY IDENTIFICATION**

   **PRODUCT NAME:** ESD ABS  
   **TRADE NAME AND SYNONYMS:** Fiberlogy ESD ABS  
   **CHEMICAL FAMILY:** ABS  
   **COMPANY NAME:** Fiberlab S.A.  
   **ADDRESS:** Brzezie 387, 32-014 Brzezie, Poland  
   **TELEPHONE:** +48 731 400 201  
   **EMAIL:** office@fiberlogy.com

2. **HAZARDS IDENTIFICATION**

   2.1. **CLASSIFICATION OF THE SUBSTANCE OR MIXTURE**  
   According to Regulation (EC) No 1272/2008 [CLP]: No need for classification according to GHS criteria for this product.

   2.2. **LABEL ELEMENTS**  
   According to Regulation (EC) No 1272/2008 [CLP]: The product does not require a hazard warning label in accordance with GHS criteria.

   2.3. **OTHER HAZARDS**  
   According to Regulation (EC) No 1272/2008 [CLP]: No specific dangers known. If the regulations/notes for storage and handling are considered. Generation of dust should be avoided, since this may cause slight irritation of eyes. skin and respiratory system.

3. **COMPOSITION/INFORMATION ON INGREDIENTS**

   3.1. **SUBSTANCES**  
   > 95% Acrylonitrile-Butadiene-Styrene copolymer (ABS) (CAS. 9003-56-9)  
   < 5% Short tangled MWCNTs
4. FIRST-AID MEASURES

4.1. DESCRIPTION OF FIRST AID MEASURES

**If inhaled:** Move treated person to fresh air. Call a physician immediately.

**Contact with the skin:** Rinse immediately with plenty of water for at least 15 minute. If skin irritation persist: Call a physician. Cool skin rapidly with cold water after contact with hot melted polymer. Do not pull solidified product away from the skin.

**Contact with the eyes:** In case of contact material dust with the eyes, rinse immediately for at least 15 minutes with plenty of water under eyelid. If irritation develops: Seek medical attention.

**On ingestion:** Rinse mouth and then drink plenty of water. If difficulties occur: Seek medical attention

**Information for medical:** Treat symptoms.

5. FIRE-FIGHTING MEASURES

5.1. EXTINGUISHING MEDIA

*Suitable extinguishing media:* water spray, foam, dry powder, carbon dioxide.

*Unsuitable extinguishing media:* water jet.

5.2 HAZARDS ARISING FROM THE SUBSTANCE OR MIXTURE

In case of combustion: formation of carbon monoxide, carbon dioxide, nitrogen oxides, organic decomposition products.

5.3. ADVICE FOR FIRE-FIGHTERS

Provide/wear a protective breathing apparatus. Wear suitable protective clothing.

Further information:

The degree of risk is governed by the burning substance and the fire conditions. In case of combustion evolution of toxic gases/vapours possible. Dispose of fire debris and contaminated extinguishing water in accordance with official regulations.

6. ACCIDENTAL RELEASE MEASURES

6.1. PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURE

Sources of ignition should be kept well clear. Avoid contact with the skin and eyes. Avoid inhalation of dust. If necessary, wear dust masks and safety glasses.
6.2. ENVIRONMENTAL PRECAUTIONS
Should not be released into the environment

6.3. METHODS AND MATERIAL FOR CONTAINMENT AND CLEANING UP
Sweep/shovel up. Avoid raising dust. Ensure adequate ventilation. Dispose of absorbed material in accordance with regulations.

6.4. REFERENCE TO OTHER SECTIONS
Information regarding exposure controls/personal protection and disposal considerations can be found in section 8 and 13.

7. HANDLING AND STORAGE

7.1. PRECAUTIONS FOR SAFE HANDLING
Processing machines must be placed in room’ with good ventilation. Avoid the formation and deposition of dust. Handle in accordance with good industrial hygiene and safety practice.

7.2. CONDITIONS FOR SAFE STORAGE. INCLUDING ANY INCOMPATIBILITIES
Information about fire and explosion protection: Make use of general rules of fire prevention.
In case of formation of dust: Take measures to prevent electrostatic charging. Avoid all sources of ignition: heat, sparks, open flame.
Storage: Well closed/packed, cool and dry. Protect against moisture and heat. Contamination with other substances must be avoided. Storage together with hazardous substances must be avoided.

7.3. SPECIFIC END USES
For the relevant identified uses listed in section 1 the advice mentioned in this section is to be observed.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. CONTROL PARAMETERS
Provide local ventilation appropriate to the product decomposition risk. Apply technical measures to comply with the occupational exposure limits.
Styrene (CAS: 100-42-5)
Acrylonitrile (CAS: 107-13-1)
Butadiene (CAS: 106-99-0)
Particulates not otherwise classified (inhalable): TWA (8h): 10mg/m³ (dust)
8.2. EXPOSURE CONTROLS

Personal protective equipment:

Respiratory protection: breathing protection if dusts are formed. Particle filter (Type P1).

Hand protection: use additional heat protection gloves when handling hot molten masses (EN 407).

Eye protection: safety glasses with side-shields (frame goggles) (p. g. EN 166).

Body protection: body protection must be chosen depending on activity and possible exposure, e.g. apron, protecting boots, chemical-protection suit.

General safety and hygiene measures: avoid contact of molten material with skin. Avoid inhalation of dusts/mistsvapours. Eye wash fountains and safety showers must be easily accessible. Handle in accordance with good industrial hygiene and safety practice. Hands and/or face should be washed before breaks and at the end of the shift. Do not eat, drink or smoke at work. Consult the company Industrial Hygienist for recommendations on exposure testing and personal protective equipment.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1. INFORMATION ON BASIC PHYSICAL AND CHEMICAL PROPERTIES

State of aggregation: solid
Shape: round filament
Odour: faint specific
Apparent density: 1.05 g/cm³
Solubility in water: insoluble
Ignition temperature: > 400°C

9.2. OTHER INFORMATION
None.

10. STABILITY AND REACTIVITY

10.1. REACTIVITY
No reactions if stored and handled as prescribed/indicated.

10.2. CHEMICAL STABILITY
The product is stable if stored and handled as prescribed/indicated.

10.3. POSSIBILITY OF HAZARDOUS REACTIONS
The product is stable if stored and handled as prescribed/indicated.
10.4. CONDITIONS TO AVOID
Avoid extreme heat above 2300°C. Avoid all sources of ignition: heat, sparks, open flame. Protect from moisture, direct sunlight and/or heat. Avoid dust formation.

10.5. INCOMPATIBLE MATERIALS
Strong oxidizing and reducing agents, strong acids and bases.

10.6. HAZARDOUS DECOMPOSITION PRODUCTS
At prolonged and/or strong thermal stressing above the decomposition temperature dangerous decomposition products can be formed (carbon monoxide, carbon dioxide, nitrogen oxides, organic decomposition products).

11. TOXICOLOGICAL INFORMATION

11.1. INFORMATION ON TOXICOLOGICAL EFFECTS
There are known neither short- nor long-term toxicological effects.

12. ECOLOGICAL INFORMATION

Biodegradability: No biodegradation expected.
Toxicity to fish: No data available.
Toxicity for daphnia: No data available.
Toxicity for algae: No data available.
Environmental precautions: Avoid losses to the environment whenever possible.

13. DISPOSAL CONSIDERATIONS

13.1. WASTE TREATMENT METHODS
Disposal by recycling or incineration is suggested. Whereby all national and local regulations must be followed.

14. TRANSPORT INFORMATION
Not classified as a dangerous good under transport regulations (ADR, RID, ADN, IMDG, ICAO/IATA).

15. REGULATORY INFORMATION
REACH Status: the substance(s) in this product has (have) been Pre-Registered and/or Registered, or are exempted from registration according to EEC Regulation REACH 1907/2006.
All components of this product are listed on the following chemical inventories: Toxic Substances Control Act (TSCA-USA), European Inventory of Existing Commercial Chemical Substances (EINECS), Canadian Domestic Substance List (DSL) or non-Domestic Substances List (NDSL), Japanese Existing and New Chemical Substance (ENCS), Korean Existing Chemical Substance (ECL), Australian Inventory of Chemicals Substance (AICS), Philippines Inventory of Chemicals and Chemical Substances (PICCS), Swiss Giftliste 1 Inventory of Notified New Substances, Chinese Chemical Inventory of Existing Chemical Substance (IECS) and Taiwan Existing Chemical Substance Nomination (ECN).

16. OTHER INFORMATION
The information is provided as a way of a guide to the use of our product and is correct to the best of our knowledge. However, neither Fiberlab S.A. nor its subsidiaries can offer any guarantee as to its accuracy or exhaustiveness. All chemicals may present unforeseen risks and should be used with caution. We can not guarantee that the risks referred to above are the only risks present. The final choice of the application of a product is thus the sole responsibility of the user.