MATERIAL SAFETY DATA SHEET
ABS

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

Date: 12/07/2017

1. CHEMICAL PRODUCT & COMPANY IDENTIFICATION

PRODUCT NAME:	ABS filament
TRADE NAME AND SYNONYMS :	Fiberlogy ABS filament
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 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
vPvB/PBT assessement: not available

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 SUBSTANCES

> 98 % Acrylonitrile-Butadiene-Styrene copolymer (CAS: 9003-56-9)
≤ 2 % Additives

3.2 MIXTURES
Chemical composition:
- polymers,
- where required: filling additives,
- where required: functional additives.

3.3 ADDITIONAL INFORMATION:

REACH info:	Pre-registration No.	Registration No.
Acrylonitrile:	05-2117149456-38-0000;	01-2119474195-34-0045
Styrene:	05-2117149462-45-0000;	01-2119457861-32-0006
		01-2119457861-32-0007
		01-2119457861-32-0057
		01-2119457861-32-0065
		01-2119457861-32-0081
Buta-1,3-diene:	05-2117149467-35-0000;	01-2119471988-16-0044

4. FIRST-AID MEASURES

4.1 DESCRIPTION OF FIRST-AID MEASURES

If inhaled: Move treated person to fresh air. Call a physician immediately. Remove contaminated clothes.

Contact with the skin: Rinse immediately with plenty of water and soap in case of contact with smelt for at least 15 minute. If skin irritation persist, call a physician. Cool skin rapidly with cold water after conntact with hot melted polymer.

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. In case of contact with gases evolving from melted resin or hot polymer flush plenty of water and contact with medical care if necessary.

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

4.2 MOST IMPORTANT SYMPTOMS AND EFFECTS, BOTH ACUTE AND DELAYED

Symptoms: Dust: May occur skin irritation and eye redness and irritation.

Hazards: Risk of skin burns caused by hot melt at improper processing. Apart from that no hazard is expected under intended use and appropriate handling.

4.3 INDICATION OF ANY IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT NEEDED

Continuation of first aid measures. Treat according to symptoms (decontamination, vital functions), no known specific antidote.

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 SPECIAL 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.

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 especially sewage systems or water bodies. Inform respective authorities in cas of water reaches.

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.

Measures to prevent aerosol and dust generation: maintain good housekeeping standards to prevent accumulation of dust. To avoid dust explosion resulting from the existence of powder, electrostatics

eliminators and grounding should be fixed to such equipment as air transferring pipes, bag filters and hoppers. Use electrically conductive filters for bag filters.

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, direct strong sunlight 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

The product does not contain any relevant quantities of materials with occupational exposure limits.

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) (e. 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/mists/vapours. 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: continous solid fiber

Shape: round filament

Odour: none

Flash point 404°C

Apparent density: 1,03-1,10 g/cm3

Solubility in water (20 °C): insoluble

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. Avoid all sources of ignition: heat, sparks, open flame. Protect from moisture.

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.

Other information

Styrene:

- Harmful if inhaled. Causes damage to organs through prolonged or repeated exposure.
- lung damages
- May be fatal if swallowed and enters airways.
- Causes serious eye irritation. Causes skin irritation.

Acrylonitrile:

- Toxic by inhalation, in contact with skin and if swallowed.
- May cause cancer. Suspected of damaging the unborn child.
- Causes skin irritation. May cause an allergic skin reaction. Causes serious eye
- damage.

1,3-Butadiene:

- May cause cancer. May cause genetic defects.

Symptoms:

- Dust: Can cause skin, eye and respiratory tract irritation.
- The melted product can cause severe burns.
- Thermal treatment,

Processing:

- Irritating to eyes, respiratory system and skin.
- In case of ingestion: Swallowing may cause gastrointestinal irritation and pain of guts.

12. ECOLOGICAL INFORMATION

12.1 TOXICITY

Short-term aquatic toxicity

Based on available data on the constituents the classification criteria are not met LC(50) mixture = 5.78 mg/l (additivity and summation method, toxicity information available for 92,5 % of the mixture)

Long-term aquatic toxicity

Based on available data on the constituents the classification criteria are met and the mixture is therefore classified as Aquatic Chronic 1 NOEC mixture = 0.0079 mg/l (additivity and summation method, toxicity information available for 78 % of the mixture)

12.2 PERSISTENCE AND DEGRADABILITY

Further details:

- Biodegradation: Product is not readily biodegradable.

- The product is likely to persist in the environment.

12.3 BIOACCUMULATIVE POTENTIAL

To avoid bioaccumulation plastics should not be disposed in the sea or in other water environments.

12.4 MOBILITY IN SOIL

No data available.

12.5 RESULTS OF PBT AND VPVB ASSESSMENT

No data available.

12.6 OTHER ADVERSE EFFECTS

General information: Do not allow to enter into ground-water, surface water or drains.

13. DISPOSAL CONSIDERATIONS

13.1 WASTE TREATMENT METHODS

Disposal by recycling or incineration is suggested, whereby all national and local regulations must be followed. Waste treatment-relevant information: Inadequate incineration may generate toxic gases such as CO, HCN, AN and SM

14. TRANSPORT INFORMATION

Not classified as a dangerous good under transport regulations (ADR, RID, ADN, IMDG).

14.1 UN NUMBER

Not applicable.

14.2 UN PROPER SHIPPING NAME

Not applicable.

14.3 TRANSPORT HAZARD CLASSES

Not applicable.

14.4 PACKING GROUP

Not applicable.

14.5 ENVIRONMENTAL HAZARDS

Not applicable.

14.6 SPECIAL PRECAUTIONS FOR USER

None known.

14.7 TRANSPORT IN BULK ACCORDING TO ANNEX II OF MARPOL73/78 AND THE IBC CODE

Regulation: not evaluated.

Shipment approved: not evaluated.

Pollution name: not evaluated.

Pollution category: not evaluated.

Ship Type: not evaluated.

15. REGULATORY INFORMATION

15.1 SAFETY, HEALTH AND ENVIRONMENTAL REGULATIONS/LEGISLATION SPECIFIC FOR THE SUBSTANCE OR MIXTURE

Water hazard class: not hazardous to water.

15.2 CHEMICAL SAFETY ASSESSMENT

A safety data sheet for this product is legally not required and is provided by us just as a courtesy to our customers. Product is not classified as hazardous. Chemical safety assessment not required.

16. OTHER INFORMATION

The data contained in this safety data sheet are based on our current knowledge and experience and describe the product only with regard to safety requirements.

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.