

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

Date: December 10, 2018

1. PRODUCT & COMPANY IDENTIFICATION

PRODUCT NAME: IMPACT PLA

TRADE NAME AND SYNONYMS: Fiberlogy IMPACT PLA

CHEMICAL FAMILY: Biopolimer PLA

COMPANY NAME: Fiberlab S.A.

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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

- > 98% polylactide resin (CAS. 9051-89-2)
- < 2% pigment

3.2. MIXTURES

Chemical composition:

- PLA Biopolymer,
- where required: filling additives,
- where required: functional additives.



3.3. ADDITIONAL INFORMATION Not known.

4. FIRST-AID MEASURES

4.1. DESCRIPTION OF FIRST AID MEASURES

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

<u>Contact with the skin:</u> 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.

<u>Contact with the eyes:</u> 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.

4.2. IMPORTANT SYMPTOMS AND EFFECTS, BOTH ACUTE AND DELAYED

Symptoms: No significant reaction of the human body to the product known.

<u>Hazards:</u> 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

<u>Suitable extinguishing media:</u> water spray, foam, dry powder, carbon dioxide. <u>Unsuitable extinguishing media:</u> 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.

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

<u>Information about fire and explosion protection</u>: Make use of general rules of fire prevention. <u>In case of formation of dust</u>: Take measures to prevent electrostatic charging. Avoid all sources of ignition: heat, sparks. open flame.

<u>Storage</u>: 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

The product does 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).

<u>Hand protection</u>: 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).

<u>Body protection</u>: 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/mistv/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: solid

Shape: round filament

Odour: none to slightly sweet

Apparent density: 1.22 g/cm³ Solubility in water: 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 above 2300C. 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.

12. ECOLOGICAL INFORMATION

12.1. TOXICITY

Inert natural material, no known deleterious environmental effects.

12.2. PERSISTENCE AND DEGRADABILITY

Biodegradability adjustable and depending on the of the product type.

12.3. BIOACCUMULATIVE POTENTIAL

No data available.

12.4. MOBILITY IN SOIL

No data available



12.5. RESULTS OF PBT AND vPvB ASSESSMENT No data available.

12.6. OTHER ADVERSE EFFECTS

There are known no harmful effects.

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).

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 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.