MATERIAL SAFETY DATA SHEET
HIPS

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

Date: 12/07/2017

1. CHEMICAL PRODUCT & COMPANY IDENTIFICATION

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

2. COMPOSITION / INFORMATION ON INGREDIENTS

INGREDIENT NAME:	High Impact Polystyrene, HIPS
CAS NUMBER :	9003-55-8
HAZARDOUS SUBSTANCE:	None

Notes:
Preparation does not contain dangerous substances above limits that need to be mentioned in this section according to applicable legislation.

3. HAZARD IDENTIFICATION

3.1 CLASSIFICATION OF THE SUBSTANCE OR MIXTURE

Classification according to EC regulation 1272/2008 (CLP) – This substance is classified as not hazardous.
Classification according to directive 67/548/EEC – This substance is classified as not hazardous.

3.2 LABEL ELEMENTS

LABELLING (CLP)
Hazard statements: not applicable
Safety precautions: not applicable

LABELLING (67/548/EEC or 1999/45/EC)
R phrase(s): not applicable
S phrase(s): not applicable

3.3 OTHER HAZARDS

DUST: Can cause skin, eye and respiratory tract irritation.
IN CASE OF DUST (FINE DUST): danger of dust explosion
The melted product can cause severe burns.

4. FIRST AID MEASURES

4.1 IN CASE OF INHALATION:

Provide fresh air. Put victim at rest and keep warm. seek medical attention

4.2 IN CASE OF SKIN CONTACT:

The melted product can cause severe burns. Do not remove the product from the skin without medical assistance. After contact with molten product, cool skin area rapidly with cold water. Consult physician.

4.3 AFTER EYE CONTACT:

Immediately flush eyes with plenty of flowing water for 10 to 15 minutes holding eyelids apart. Consult an eye specialist in the event of irritation. Remove contact lenses, if present and easy to do. Continue rinsing.

4.4 AFTER SWALLOWING:

Do not induce vomiting. Rinse mouth with water. Drink one or two glasses of water. Never give an unconscious person anything through the mouth.

4.5 MOST IMPORTANT SYMPTOMS AND EFFECTS, BOTH ACUTE AND DELAYED:

no data available

4.6 INDICATION OF ANY IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT NEEDED:

Treat symptomatically.

5. FIRE FIGHTING MEASURES

5.1 SUITABLE EXTINGUISHING MEDIA:

Water fog, foam.

5.2 ONLY IN CASE OF SMALL FIRES:

extinguishing powder, carbon dioxide, sand, earth.

5.3 EXTINGUISHING MEDIA WHICH MUST NOT BE USED FOR SAFETY REASONS:

High power water jet

5.4 SPECIAL HAZARDS ARISING FROM THE SUBSTANCE OR MIXTURE

In case of fire may be liberated: smoke, Styrene-Monomer, butadiene, aldehydes and acids (organic), carbon monoxide and carbon dioxide (CO2).

5.5 ADVICE FOR FIREFIGHTERS

SPECIAL PROTECTIVE EQUIPMENT FOR FIREFIGHTERS: Wear self-contained breathing apparatus. ADDITIONAL INFORMATION: Cool endangered containers with water jetspray.

6. ACCIDENTAL RELEASE MEASURES

6.1 PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES

Dust may form explosive mixtures with air. Remove all sources of ignition. Provide adequate ventilation. Do not breathe dust. Wear personal protection equipment.

6.2 ENVIRONMENTAL PRECAUTIONS

Do not allow to penetrate into soil, waterbodies or drains.

6.3 METHODS AND MATERIAL FOR CONTAINMENT AND CLEANING UP

Avoid generation of dust. Take up mechanically. Can be reused without regeneration. Otherwise, dump or burning.

6.4 ADDITIONAL INFORMATION:

Take precautionary measures against static discharge. Particular danger of slipping when spread on the ground.

6.5 REFERENCE TO OTHER SECTIONS:

Refer additionally to chapter 8 and 13.

7. STORAGE AND HANDLING

7.1 PRECAUTIONS FOR SAFE HANDLING

ADVICES ON SAFE HANDLING: Provide adequate ventilation, and local exhaust as needed. Avoid dust formation. In the case of the formation of dust: Withdraw by suction.
MOLTEN MATERIAL: Avoid contact with the substance.

7.2 PRECAUTIONS AGAINST FIRE AND EXPLOSION: Dust may form explosive mixtures with air. Take precautionary measures against static discharge. Keep away from sources of ignition. Use grounding equipment. Use explosion-proof equipment and non-sparking tools/utensils.

7.3 CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES

Requirements for storerooms and containers: Store in a well-ventilated place. Keep container tightly closed. Protect against heat /sun rays.

Further details: Special danger of slipping by leaking/spilling product.

Storage class: 11 = Combustible solids

Specific end use(s): No information available.

8. EXPOSURE CONTROL & PERSONAL PROTECTION

8.1 OCCUPATIONAL EXPOSURE LIMIT VALUES:

TYPE	LIMIT VALUE
Great Britain: WEL-TWA	10 mg/m³
Great Britain: WEL-TWA	4 mg/m³
Ireland: 8 hours	10 mg/m³
Ireland: 8 hours	4 mg/m³

8.2 ADDITIONAL INFORMATION:

The product contains very low levels of residual monomers (Styrene and Butadiene) and process chemicals that may be evolved during thermal processing. As the identity and levels of these components evolved will depend upon the processing conditions (temperature etc.) it is the responsibility of the user to determine the adequacy of any protection or safety measures.

8.3 EXPOSURE CONTROLS:

Provide good ventilation and/or an exhaust system in the work area.

8.4 OCCUPATIONAL EXPOSURE CONTROLS

Respiratory protection: In case of dust: Use filter type A-P1 according to EN 14387.
Hand protection: Protective gloves according to EN 374.Glove material: Nitrile rubber - Layer thickness: 0,11 mm. Breakthrough time: >480 min. Observe glove manufacturer's instructions concerning penetrability and breakthrough time.
In case of melting: Protective gloves against heat according to EN 407. Observe glove manufacturer's instructions concerning penetrability and breakthrough time.
Eye protection: Tightly sealed goggles according to EN 166.
Body protection: Wear suitable protective clothing.

8.5 GENERAL PROTECTION AND HYGIENE MEASURES:

Do not breathe dust. Take off immediately all contaminated clothing. When using do not eat, drink or smoke. Wash hands before breaks and after work. Eye wash facility must be provided.

8.6 IN CASE OF DUST:

Particular danger of slipping when spread on the ground.

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE: Physical state: solid, filament
ODOUR: weak
pH VALUE: not applicable
MELTING POINT: 105 - 135 °C
INITIAL BOILING POINT AND BOILING RANGE: not applicable
FLASH POINT/FLASH POINT RANGE: > 280 °C
EVAPORATION RATE: no data available
FLAMMABILITY: Not highly flammable.
VAPOUR PRESSURE: not applicable
VAPOUR DENSITY: no data available
DENSITY: at 20 °C: 1,03 g/cm³ (ISO 1183)
WATER SOLUBILITY: insoluble
PARTITION COEFFICIENT: n-octanol/water: not relevant
AUTO-IGNITION TEMPERATURE: not self-igniting
THERMAL DECOMPOSITION: 300 °C
VISCOSITY, DYNAMIC: not applicable
EXPLOSIVE PROPERTIES: In case of dust (Fine dust): danger of dust explosion
OXIDIZING CHARACTERISTICS: not oxidising

OTHER INFORMATION

IGNITION TEMPERATURE: approx. > 400 °C
BULK DENSITY: 600 g/cm³
DROP POINT/DROP RANGE: 79 - 127 °C
ADDITIONAL INFORMATION: no data available

10. STABILITY AND REACTIVITY

10.1 CHEMICAL STABILITY:

Product is stable under normal storage conditions.

10.2 POSSIBILITY OF HAZARDOUS REACTIONS:

In case of dust (Fine dust): danger of dust explosion

10.3 CONDITIONS TO AVOID:

Avoid dust formation. Dust may form explosive mixtures with air. Keep away from sources of ignition. - No smoking.

10.4 INCOMPATIBLE MATERIALS:

Strong oxidizing agents

10.5 HAZARDOUS DECOMPOSITION PRODUCTS:
In case of fire may be liberated: smoke, Styrene-Monomer, butadiene, aldehydes and acids (organic), carbon monoxide and carbon dioxide (CO2). Thermal decomposition: 300 °C

11. TOXICOLOGICAL INFORMATION

11.1 INFORMATION ON TOXICOLOGICAL EFFECTS

ACUTE TOXICITY:
LD50 oral: > 2000 mg/kg
LD50 dermal: > 2000 mg/kg

11.2 TOXICOLOGICAL EFFECTS:

ACUTE TOXICITY (ORAL): Based on available data, the classification criteria are not met. Mild acute toxicity

ACUTE TOXICITY (DERMAL): Based on available data, the classification criteria are not met. Mild acute toxicity
ACUTE TOXICITY (INHALATIVE): Based on available data, the classification criteria are not met. Mild acute toxicity. May cause irritations.

SKIN CORROSION/IRRITATION: Lack of data.
DUST: Can cause skin, eye and respiratory tract irritation.
PROCESSING, THERMAL HAZARDS: Vapours: Can cause skin, eye and respiratory tract irritation.

EYE DAMAGE/IRRITATION: Lack of data.
DUST: Can cause skin, eye and respiratory tract irritation.
PROCESSING, THERMAL HAZARDS: Vapours: Can cause skin, eye and respiratory tract irritation.

SENSITISATION TO THE RESPIRATORY TRACT: Lack of data. The chemical structure does not suggest a specific alert for such an effect.

SKIN SENSITISATION: Based on available data, the classification criteria are not met. Not sensitising.

GERM CELL MUTAGENICITY/GENOTOXICITY: Lack of data. The chemical structure does not suggest a specific alert for such an effect.

CARCINOGENICITY: Based on available data, the classification criteria are not met.

REPRODUCTIVE TOXICITY: Lack of data. The chemical structure does not suggest a specific alert for such an effect.

EFFECTS ON OR VIA LACTATION: Lack of data.

SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE): Lack of data.

DUST: Can cause skin, eye and respiratory tract irritation.

PROCESSING, THERMAL HAZARDS: Vapours: Can cause skin, eye and respiratory tract irritation.

SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE): Lack of data. Chronic toxic effects are not expected. The product has not been tested. The statement is derived from products of similar structure or composition.

ASPIRATION HAZARD: Lack of data.

11.3 OTHER INFORMATION:

When handled appropiately, even after long years of experience with this product, no adverse health effects are known.

11.4 SYMPTOMS

DUST: Skin irritation, eye irritations and redness
The melted product can cause severe burns.
PROCESSING, THERMAL HAZARDS: Irritating to eyes, respiratory system and skin.

12. ECOLOGICAL INFORMATION

12.1 TOXICITY

AQUATIC TOXICITY: no evidence of aquatic toxicity

12.2 PERSISTENCE AND DEGRADABILITY

FURTHER DETAILS
Biodegradation: Product is not readily biodegradable.
Degradation at UV-radiation/sunlight
Environmental half-life period: >=100 days (estimated)

12.3 EFFECTS IN SEWAGE PLANTS
Not toxic to sewage organisms
In sewage treatment plants it may be separated mechanically.

12.4 BIOACCUMULATIVE POTENTIAL
To avoid bioaccumulation plastics should not be disposed in the sea or in other water environments.
Partition coefficient: n-octanol/water: not relevant

12.5 MOBILITY IN SOIL
Product is not soluble in water.
Substance is heavier than water and sinks.
mobility in soil: low

12.6 RESULTS OF PBT AND VPVB ASSESSMENT
This substance does not meet the PBT/vPvB criteria of REACH, annex XIII.

12.7 OTHER ADVERSE EFFECTS
General information: Do not allow to penetrate into soil, waterbodies or drains.

13. DISPOSAL CONSIDERATIONS

13.1 WASTE TREATMENT METHODS

PRODUCT
WASTE KEY NUMBER: 07 02 13 = Waste plastic
RECOMMENDATION: With due observance of the regulations laid down by the local authorities, this must be brought to a suitable incineration plant/waste disposal site.

CONTAMINATED PACKAGING
RECOMMENDATION: Dispose of waste according to applicable legislation. Non-contaminated packages may be recycled.

14. TRANSPORT REGULATIONS

14.1 PROPER SHIPPING NAME:

Not applicable.

14.2 UN NUMBER:

not applicable

14.3 ADR/RID, IMDG, IATA:

Not restricted

14.4 TRANSPORT HAZARD CLASS(ES):

not applicable

14.5 PACKING GROUP:

not applicable

14.6 ENVIRONMENTAL HAZARDS:

Marine pollutant: No

14.7 SPECIAL PRECAUTIONS FOR USER:

No dangerous good in sense of these transport regulations.

14.8 TRANSPORT IN BULK ACCORDING TO ANNEX II OF MARPOL 73/78 AND THE IBC CODE:

no data available

15. REGULATORY INFORMATION

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

NATIONAL REGULATIONS - GREAT BRITAIN
Hazchem-Code: -

NATIONAL REGULATIONS – USA

TSCA Inventory: listed; EPA flags XU
TSCA HPVC: not listed

CARCINOGEN STATUS:
IARC Rating: Group 3
OSHA Carcinogen: not listed
NTP Rating: not listed

HAZARD RATING SYSTEMS

NFPA HAZARD RATING:
Health: 1 (Slight)
Fire: 1 (Slight)
Reactivity: 0 (Minimal)

HMIS VERSION III RATING:
Health: 1 (Slight)
Flammability: 1 (Slight)
Physical Hazard: 0 (Minimal)
Personal Protection: X = Consult your supervisor

NATIONAL REGULATIONS – CANADA
DSL: listed

15.2 CHEMICAL SAFETY ASSESSMENT

For this substance a chemical safety assessment is not required.

16. OTHER INFORMATION

For abbreviations and acronyms, see: ECHA Guidance on information requirements and chemical safety assessment, chapter R.20 (Table of terms and abbreviations).

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