MATERIAL SAFETY DATA SHEET

FILAFLEX FOAMY

1. Product and company identification

1.1. Trade name

Filaflex FOAMY

1.2. Company details

Recreus Industries S.L.,
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2. Hazards identification

Classification of the substance or mixture:

According to EU regulation 1272/2008 not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008.

Label elements:

Labelling (REGULATION (EC) No 1272/2008)

Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008.

This product does not contain substances listed in Annex XIV of REACH regulation EC 1907/2006.

3. Composition/information on ingredients

Polymer. Thermoplastic polyurethane. Polyurethane polymer from methylenediphenyl diisocyanate, glycols, polyester/polyether polyol and foam additives.

Name	CAS Number	%	Classification according to regulations (EC) No. 1272/2008 [CLP]
amorfous silica	(CAS-No.) 17631-86-9	0.5-6	No aplicable
2-Methylbutane	(CAS-No.) 540-84-1	0.01-0.5	No aplicable

4. First-aid measures

- **General instruction:** Change clothes impregnated with the product.
- **In case of inhalation:** Supply fresh air. In case of disturbances, consult a doctor.
- **After inhalation of decomposition products**, breathe fresh air, rest, seek medical help.
- **In case of skin contact:** Wash with soap and water. Visit your doctor if irritation continues skin.
- **After contact with molten products**, cool rapidly with cold water. No skin separating the solidified product. Call a doctor immediately.
- **In case of eye contact:** Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor. Remove contact lenses, if present and easy. Continue rinsing.
- **If swallowed:** Rinse mouth and drink plenty of water. Do not induce vomiting. Consult the doctor in case of persistent symptoms.

5. Firefighting measures

- Suitable extinguishing media: Water, Foam, Dry chemical.
- Burning releases carbon monoxide, carbon dioxide, oxides of nitrogen and traces of hydrogen cyanide. In the event of fire and/or explosion do not breathe fumes.
- Firemen must wear self-contained breathing apparatus.
- Do not allow contaminated extinguishing water to enter the soil, groundwater or surface waters.

6. Measures in case of accidental release

6.1. Personal precautions

- Protective equipment and emergency procedures.
- Avoid dust formation.
- Do not breathe dust.
- Keep away from sources of ignition.
- Avoid eye contact.
- Danger of slipping on spilled product or pouring.

6.2. Environmental cautions

Do not discharge into drains/surface water/groundwater.

6.3 Methods and Materials for containment and cleaning up

Allow to solidify, pick up mechanically. Dispose of the material collected according to regulations.

7. Handling and storage

Handling
Adequate ventilation and if necessary, effective exhaust must be provided at the workplace of fused deposition modeling process.

Provided good ventilation and/or local exhaust systems are used, the Workplace Exposure Limit(s) stated in Chapter 8 should not be exceeded. Dust must be removed by effective exhaust ventilation.

Storage

Keep the container tightly closed and dry. Storage temperature: < 40 °C.

8. Exposure controls/personal protection

Monitoring indicators

Product Name	**Exposure limite**
amorfous silica	OEL respirable fraction VLA not available
2-Methylbutane	VLA-ED 3.000 mg/m³ INSHT (National Institute for Safety and Hygiene at Work)

Ventilation

During fused deposition modeling operations, use with ventilation adequate to reduce levels of air contaminants below that which may cause personal injury or illness. Local exhaust ventilation that removes air contaminants from the breathing zone is prefered. General, mechanical, or dilution ventilation may be suitable.

Respiratory protection

In case of dust formation use respiratory equipment with filter type particle filter P1 according to EN 143.

Hand protection

Suitable materials for safety gloves; EN 374-3: polyvinyl chloride - PVC (>= 0.5 mm). Contaminated and/or damaged gloves must be changed.

Eye protection

Wear eye/face protection.

Skin and body protection

Wear suitable protective clothing.

Further protective measures

Do not breathe dust/vapor. Grease skin.

9. Physical and chemical properties

Appearance:	Various colors
Odor:	Odorless
Odour Threshold:	NA
PH:	NA
Boiling Point (° C):	NA
Melting point (° C):	220-240
Softening point (° C):	105
Evaporation Rate:	NA
Properties Flammable / Explosive:	NA

Vapor pressure / vapor density:	NA
Relative density:	1.05
Solubility:	NA
Octanol/water partition:	NA
Auto-ignition temperature:	NA
Decomposition temperature:	NA
Viscosity:	NA
Other properties:	NA

10. Stability and reactivity

Reactivity

Non-applicable

Chemical stability

Thermal decomposition/conditions to be avoided:

- No decomposition with storage and proper handling.
- Avoid impact, friction, heat, sparks, and electrostatic charges.

Possibility of dangerous reactions: Non-applicable.

Conditions to be avoided: No further relevant information.

Incompatible materials: Strong oxidants.

Strong decomposition products

- Irritant gases/vapours
- Toxic gases/vapours
- Smoke
- Carbon monoxide (CO) and carbon dioxide (CO_2) emissions

11. Toxicological information

Acute toxicity LD50 oral rat: > 5000 mg/kg.

Acute toxicity LD50 subcutaneous, rat: > 5000 mg/kg.

Primary skin irritation, rabbit: non-irritant.

Primary mucosal irritation, rabbit: non-irritant.

Skin sensitisation according to Magnusson/Kligman (maximizing test): No avaible

Additional information: According to our experience and information the product has no harmful effects on health if properly handled.

12. Ecological information

Ecotoxicity Toxic to aquatic life with long lasting harmful effects

LC50	- Peces	0.11 mg/l (96 horas)
EC50	- Crustáceos	0.4mg/l (48 horas)
NOEC	- Crustáceos	0.17 mg/l (504 horas)

Mobility - It has not been established

Persistence and degradability - It has not been established

Additional ecological information **-** Avoid release to the environment.

13. Disposal considerations

Dispose in accordance with applicable international, national and local laws, ordinances and statutes. For disposal within the EC, the appropriate code according to the European Waste Catalogue (EWC) should be used.

After containers have been emptied as thoroughly as possible (e.g. by pouring, scraping or draining until "drip-dry"), they can be sent to an appropriate collection point to set the framework of the existing take-back scheme of the chemical industry. Containers must be recycled in compliance with national legislation and environmental regulations.

The product is suitable for mechanical recycling. After appropriate treatment it can be remelted and reprocessed into new moulded articles. Mechanical recycling is only possible if the material has been selectively retrieved and can be fully segregated according to type.

14. Transport information

Not regulated.

15. Regulatory information

Not regulated.

16. Other information

The data is based on the current state of knowledge, but it is not a guarantee of the product features and it is not legally valid in a contractual relationship.

Disclaimer

Is under responsibility of the 3d printer parts manufacturer or end user the compliance of the plastic object, for the specific use, with the overall migration limit, the specific migration limit and other restrictions. Do not hesitate to contact our technical service for explanations, advising and for any other need.