

Safety Data Sheet acc. to OSHA HCS

Printing date 09/29/2014

Reviewed on 09/29/2014

1 Identification

- **Product identifier**
- **Trade name:** ULTEM® 1010 Model
- **CAS Number:**
61128-46-9
- **Relevant identified uses of the substance or mixture and uses advised against**
No further relevant information available.
- **Application of the substance / the mixture** Filament for Stratasys® Inc. FDM™ modeler
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
Stratasys, Inc. Tel +1 952 937 3000
7665 Commerce Way Fax +1 952 937 0070
Eden Prairie, MN 55344
USA

- **For information in Europe contact:**
- **C.S.B. GmbH** Tel.: +49-2151-6520860
Düsseldorfer Straße 113 Fax: +49-2151-6520869
D-47809 Krefeld E-Mail: info@csb-online.de
Germany
- **Information department:** Product safety department.
- **Emergency telephone number:** see above

2 Hazard(s) identification

- **Classification of the substance or mixture**
The substance is not classified according to the Globally Harmonized System (GHS).
- **Classification according to Directive 67/548/EEC or Directive 1999/45/EC** Void
- **Label elements**
- **GHS label elements** Void
- **Hazard pictograms** Void
- **Signal word** Void
- **Hazard statements** Void
- **Classification system**
- **NFPA ratings (scale 0-4)**



- **HMIS**



- **Other hazards** Void
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

USA

(Contd. on page 2)

Safety Data Sheet
acc. to OSHA HCS

Printing date 09/29/2014

Reviewed on 09/29/2014

Trade name: ULTEM® 1010 Model

(Contd. of page 1)

3 Composition/information on ingredients

- **Chemical characterization: Substances**
- **CAS No. Description:**
61128-46-9 polyetherimide
- **Identification number(s):** void, polymer

4 First-aid measures

- **Description of first aid measures**
- **General information** Remove contaminated clothing.
- **After inhalation**
Supply fresh air; consult doctor in case of complaints.
After inhalation of decomposition products, remove the affected person to a source of fresh air and keep calm. Provide medical aid.
- **After skin contact**
Wash with soap and water.
If skin irritation continues, consult a doctor.
After contact with the molten product, cool rapidly with cold water.
Do not pull solidified product away from the skin.
Call a doctor immediately.
- **After eye contact**
Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
Remove contact lenses, if present and easy to do.
- **After swallowing**
Rinse out mouth and then drink plenty of water.
If symptoms persist consult doctor.
- **Most important symptoms and effects, both acute and delayed** No further relevant information available.
- **Indication of any immediate medical attention and special treatment needed** symptomatic treatment

5 Fire-fighting measures

- **Extinguishing media**
- **Suitable extinguishing agents**
Water haze
Water spray
- **For safety reasons unsuitable extinguishing agents**
Carbon dioxide
Extinguishing powder.
Lack of cooling capacity may permit re-ignition.
- **Special hazards arising from the substance or mixture**
Carbon monoxide and carbon dioxide
Nitrogen oxides (NOx)
Burning produces harmful and toxic fumes.
Hydrocarbons
- **Advice for firefighters**
- **Protective equipment:** Wear self-contained respiratory protective device.
- **Additional information**
Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**
Ensure adequate ventilation

(Contd. on page 3)

USA

Safety Data Sheet
acc. to OSHA HCS

Printing date 09/29/2014

Reviewed on 09/29/2014

Trade name: ULTEM® 1010 Model

(Contd. of page 2)

- Avoid formation of dust.*
- Keep away from ignition sources*
- Do not breathe dust.*
- Avoid contact with skin and eyes.*
- Danger of slipping on leaked/spilled product.*
- **Environmental precautions:** *Do not allow product to reach sewage system or any water course.*
- **Methods and material for containment and cleaning up:**
 - Ensure adequate ventilation.*
 - Pick up mechanically.*
 - Send for recovery or disposal in suitable receptacles.*
- **Reference to other sections**
 - See Section 8 for information on personal protection equipment.*
 - See Section 13 for disposal information.*

7 Handling and storage

- **Precautions for safe handling**
 - Ensure good ventilation/exhaustion at the workplace.*
 - Prevent formation of dust.*
 - If dust/smoke is developed, avoid breathing dust/smoke.*
 - Avoid prolonged or repeated skin contact.*
 - Avoid contact with eyes.*
 - Make sure that all applicable workplace limits are observed.*
 - Avoid contact with hot product.*
- **Information about protection against explosions and fires:**
 - Keep ignition sources away - Do not smoke.*
 - Protect from heat.*
 - Protect against electrostatic charges.*
- **Conditions for safe storage, including any incompatibilities**
- **Storage**
- **Requirements to be met by storerooms and receptacles:**
 - Observe all local and national regulations for storage of water polluting products.*
- **Information about storage in one common storage facility:** *Not required.*
- **Further information about storage conditions:**
 - Store receptacle in a well ventilated area.*
 - Store in cool, dry conditions in well sealed receptacles.*
 - Protect from heat and direct sunlight.*
- **Specific end use(s)** *No further relevant information available.*

8 Exposure controls/personal protection

- **Additional information about design of technical systems:** *No further data; see item 7.*
- **Control parameters**
- **Components with limit values that require monitoring at the workplace:**
 - Observe all workplace limits for dust:*
 - TLV inhalable dust: 15 mg/m³ OSHA*
 - TLV respirable dust: 5 mg/m³ OSHA*
- **Additional information:** *The lists that were valid during the creation were used as basis.*
- **Exposure controls**
- **Personal protective equipment**
- **General protective and hygienic measures**
 - Keep away from foodstuffs, beverages and feed.*
 - Do not eat, drink, smoke or sniff while working.*

(Contd. on page 4)

Safety Data Sheet

acc. to OSHA HCS

Printing date 09/29/2014

Reviewed on 09/29/2014

Trade name: ULTEM® 1010 Model

(Contd. of page 3)

- Do not breathe dust.
- Avoid close or long term contact with the skin.
- Avoid contact with the eyes.
- Wash hands before breaks and at the end of work.
- **Breathing equipment:**
If all workplace limits are observed and good ventilation is ensured, no special precautions necessary.
- **Protection of hands:**
No chemical-protective gloves required.
Use heat resistant gloves when handling hot / molten product.
- **Eye protection:** Safety glasses
- **Body protection:** Wear heat-resistant protective clothing when handling hot/molten product.

9 Physical and chemical properties

- **Information on basic physical and chemical properties**
- **General Information**
- **Appearance:**
 - Form: solid
 - Color: Different according to coloring
- **Odor:** Nearly odorless
- **Odor threshold:** no data available
- **pH-value:** Not applicable
- **Change in condition**
 - Melting point/Melting range: Not applicable
 - Boiling point/Boiling range: no data available
- **Flash point:** no data available
- **Flammability (solid, gaseous)** no data available
- **Ignition temperature:**
 - Decomposition temperature: no data available
- **Auto igniting:** Product is not selfigniting.
- **Danger of explosion:** Product does not present an explosion hazard.
- **Explosion limits:**
 - Lower: Not determined
 - Upper: Not determined
- **Oxidizing properties** Not applicable
- **Vapor pressure:** negligible
- **Density at 20 °C (68 °F):** > 1 g/cm³ (> 8.345 lbs/gal)
- **Relative density at 20 °C (68 °F)** > 1 (H₂O = 1)
- **Vapour density (AIR = 1)** Not determined
- **Evaporation rate** negligible
- **Solubility in / Miscibility with**
 - Water: Insoluble
- **Partition coefficient (n-octanol/water):** Not determined
- **Viscosity:**
 - dynamic: Not applicable
 - kinematic: Not applicable

(Contd. on page 5)

Safety Data Sheet

acc. to OSHA HCS

Printing date 09/29/2014

Reviewed on 09/29/2014

Trade name: ULTEM® 1010 Model

(Contd. of page 4)

· Other information

No further relevant information available.

10 Stability and reactivity

- **Reactivity** Not determined
- **Chemical stability**
- **Thermal decomposition / conditions to be avoided:**
Avoid impact, friction, heat, sparks, electrostatic charges.
To avoid thermal decomposition do not overheat.
- **Possibility of hazardous reactions** No dangerous reactions known
- **Conditions to avoid** No further relevant information available.
- **Incompatible materials:** Alkaline materials
- **Hazardous decomposition products:**
Carbon monoxide and carbon dioxide
Nitrogen oxides (NOx)
Hydrocarbons

11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity:**

· LD/LC50 values that are relevant for classification:

Oral	LD50	> 5000 mg/kg (rat)
Dermal	LD50	> 2000 mg/kg (rabbit)

- **Primary irritant effect:**
- **on the skin:** Dust particles may mechanically irritate the skin.
- **on the eye:** Dust particles may mechanically irritate the eye.
- **Subacute to chronic toxicity:** no data available
- **Additional toxicological information:**
When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us.

· Carcinogenic categories
· IARC (International Agency for Research on Cancer)

Substance is not listed.

· NTP (National Toxicology Program)

Substance is not listed.

· OSHA-Ca (Occupational Safety & Health Administration)

Substance is not listed.

12 Ecological information

- **Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **Persistence and degradability** No further relevant information available.
- **Degree of elimination:** no data available
- **Bioaccumulative potential** No further relevant information available.
- **Mobility in soil** No further relevant information available.
- **Additional ecological information:**
- **General notes:**
Do not allow product to reach ground water, water course or sewage system.

(Contd. on page 6)

Safety Data Sheet

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Trade name: ULTEM® 1010 Model

(Contd. of page 5)

- *Water hazard class 1 (Self-assessment) (German regulation): slightly hazardous for water.*
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **Other adverse effects** No further relevant information available.

13 Disposal considerations

- **Waste treatment methods**
- **Recommendation** Disposal must be made according to local/official regulations.
- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to local/official regulations.

14 Transport information

· UN-Number	Void
· DOT, ADR, IMDG, IATA	Void
· UN proper shipping name	Void
· DOT, IMDG, IATA	Void
· ADR	Void
· Transport hazard class(es)	
· DOT, ADR, IMDG, IATA	
· Class	Void
· Packing group	
· DOT, ADR, IMDG, IATA	Void
· Environmental hazards:	
· Marine pollutant:	No
· Special precautions for user	Not applicable.
· Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not applicable.
· Transport/Additional information:	Not dangerous according to the above specifications.
· UN "Model Regulation":	-

15 Regulatory information

· Safety, health and environmental regulations/legislation specific for the substance or mixture	
· SARA Section 355 (extremely hazardous substances)	Substance is not listed.
· SARA Section 313 (specific toxic chemical listings)	Substance is not listed.
· TSCA (Toxic Substances Control Act)	Substance is listed.
· Prop 65 - Chemicals known to cause cancer	Substance is not listed.

(Contd. on page 7)

Safety Data Sheet
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Trade name: ULTEM® 1010 Model

(Contd. of page 6)

· Prop 65 - Chemicals known to cause developmental toxicity

Substance is not listed.

· Cancerogenity categories**· MAK (German Maximum Workplace Concentration)**

Substance is not listed.

· National regulations**· Disturbance regulations:** Directive 96/82/EC does not apply.**· Water hazard class:**

Water hazard class 1 (Self-assessment) (German regulation): slightly hazardous for water.

· Chemical safety assessment: A Chemical Safety Assessment has not been carried out.**16 Other information**

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· Date of preparation / last revision 09/29/2014 / 1**· Abbreviations and acronyms:**

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)

ICAO: International Civil Aviation Organisation

ICAO-TI: Technical Instructions by the "International Civil Aviation Organisation" (ICAO)

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

CAS: Chemical Abstracts Service (division of the American Chemical Society)

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent