

OVERTURE NYLON

SDS record number: OVU-SDS-ABS01

1. Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier:

Identification on the label/Trade name: OVERTURE
Additional identification: Not available
Identification of the product: See section 3
Index Number: See section 3
REACH registration No.: See section 3

1.2 Relevant identified uses of the substance or mixture and uses advised against:

1.2.1 Identified uses:

3D Printing Filament.

1.2.2 Uses advised against:

Not available.

1.3 Details of the supplier of the safety data sheet:

Supplier(Only representative): -
Supplier(Manufacturer): Overture 3D Technologies, LLC
Contact person(E-mail): service@overture3d.com
Telephone: +1 912-441-8907
Fax: -

1.4 Emergency telephone Number:

+86-512-52058005 Only available during office hours (9:00a.m.-17:30p.m)

Available outside office hours? YES NO

2. Hazards Identification

GHS classification

Physical hazards Not classified
Health hazards Not classified
Environmental hazards Not classified

GHS label elements

Hazard Pictograms Not classified
Signal word Not classified
Hazard statement Not classified

Precautionary statement

Prevention Not classified
Response Not classified
Storage Disposal Not classified
Other hazards

3. Composition/information on ingredients

This product does not contain hazardous ingredients above cut-off value according to HCS2012

4. First aid measures

4.1 Description of first aid measures:

In all cases of doubt, or when symptoms persist, seek medical attention.

4.1.1 In case of inhalation:

None expected to require first aid measures. If breathed in, remove victim to fresh air and keep at rest in a position comfortable for breathing. If you feel unwell, seek medical attention.

4.1.2 In case of skin contact:

None expected to require first aid measures. Wash thoroughly with soap and water. Get medical attention in the unlikely event that irritation persists.

4.1.3 In case of eyes contact:

None expected to require first aid measures. Flush with running water for at least 15 minutes. If irritation persists get medical attention.

4.1.4 In case of ingestion:

Immediate first aid is not likely to be required. A physician or poison control center can be contacted for advice.

4.2 Most important symptoms and effects, both acute and delayed:

The product is not classified as harmful to human health effect.

4.3 Indication of any immediate medical attention and special treatment needed:

Symptomatic treatment.

5. Firefighting measures

5.1 Extinguishing media:

Suitable extinguishing media:

Use extinguishing agents appropriate for surrounding fire.

Unsuitable extinguishing media:

Not available.

5.2 Special hazards arising from the substance or mixture:

No specific fire or explosion hazard. In case of fire, the following can be released: carbon monoxide, carbon dioxide and oxides of nitrogen and traces of hydrogen cyanide. In the event of fire and/or explosion do not breathe fumes.

5.3 Advice for firefighters:

Wear self-contained breathing apparatus for firefighting if necessary. Firemen must wear self-contained breathing apparatus. Do not allow contaminated extinguishing water to enter the soil, ground-water or surface waters.

6. Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures:

6.1.1 For non-emergency personnel: Use personal protective equipment. Ensure adequate ventilation. Evacuate personnel to safe areas.

6.1.2 For emergency responders: Avoid skin and eye contact. Refer to section 8 of SDS for personal protection details.

6.2 Environmental Precautions: Avoid disposing into drainage/sewer system or directly into the aquatic environment.

6.3 Methods and material for Containment and Cleaning up: Sweep up and shovel into suitable containers. Clean up affected area.

6.4 Reference to other sections: See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for information on disposal.

7. Handling and storage

7.1 Precautions for safe handling:

Under recommended processing conditions small amounts of residues of monomers and residual solvent may be emitted. Provided good ventilation and/or local exhaust systems are used, the Workplace Exposure Limit(s) stated in section 8 should not be exceeded.

In case of mechanical processing, dust must be removed by effective exhaust ventilation.

Keep away from foodstuffs, drinks and tobacco. Wash hands before breaks and at end of work and use skin-protecting ointment.

Change contaminated clothing.

7.2 Conditions for safe storage, including any incompatibilities: No special storage conditions required.

7.3 Specific end use(s): No information available.

8. Exposure Controls/Personal Protection

8.1 Control parameters:

The regulations for the substances listed below must be observed when processing this product, particularly if processing takes place at elevated temperatures. In our experience the provision of effective fresh-air and exhaust ventilation equipment at the points where vapors may be generated will ensure compliance with the tolerance limits quoted below.

Substance	CAS-No.	Basis	Type	Value	Ceiling Limit Value	Remarks
styrene	100-42-5	TRGS 900				Listed.
styrene	100-42-5	TRGS 900		20 ppm 86 mg/m3	2	Y
styrene	100-42-5	TRGS 900	STEL CL			Category II: substances with a resorptive effect.
Ethylbenzene	100-41-4	EU ELV	TWA	100 ppm 442 mg/m3		Indicative
Ethylbenzene	100-41-4	EU ELV	STEL	200 ppm 884 mg/m3		Indicative
Ethylbenzene	100-41-4	EU ELV				Dermal absorption possible
Ethylbenzene	100-41-4	TRGS 900				Listed.
Ethylbenzene	100-41-4	TRGS 900				Dermal absorption possible
Ethylbenzene	100-41-4	TRGS 900		20 ppm 88 mg/m3	2	Y
Ethylbenzene	100-41-4	TRGS 900	STEL CL			Category II: substances with a resorptive effect.
phenol	108-95-2	EU ELV	TWA	2 ppm 8 mg/m3		Indicative
phenol	108-95-2	EU ELV				Dermal absorption possible
phenol	108-95-2	EU ELV	STEL	4 ppm 16 mg/m3		Indicative
phenol	108-95-2	TRGS 900				Listed.
phenol	108-95-2	TRGS 900				Dermal absorption possible
phenol	108-95-2	TRGS 900		2 ppm 8 mg/m3	2	
phenol	108-95-2	TRGS 900	STEL CL			Category II: substances with a resorptive effect.
4-tert-butylphenol	98-54-4	TRGS 900				Listed.
4-tert-butylphenol	98-54-4	TRGS 900		0,08 ppm 0,5 mg/m3	2	
4-tert-butylphenol	98-54-4	TRGS 900				Dermal absorption possible
4-tert-butylphenol	98-54-4	TRGS 900	STEL CL			Category II: substances with a resorptive effect.
chlorobenzene	108-90-7	EU ELV	TWA	5 ppm 23 mg/m3		Indicative
chlorobenzene	108-90-7	EU ELV	STEL	15 ppm 70 mg/m3		Indicative
chlorobenzene	108-90-7	TRGS 900				Listed.
chlorobenzene	108-90-7	TRGS 900		10 ppm 47 mg/m3	2	Y
chlorobenzene	108-90-7	TRGS 900	STEL CL			Category II: substances with a resorptive effect.
2,2-Bis-(4-hydroxyphenyl)-propane (4,4'-Isopropylidenediphenol)	80-05-7	EU ELV	TWA	2 mg/m3		Indicative
2,2-Bis-(4-hydroxyphenyl)-propane (4,4'-Isopropylidenediphenol)	80-05-7	TRGS 900				Listed.
2,2-Bis-(4-hydroxyphenyl)-propane (4,4'-Isopropylidenediphenol)	80-05-7	TRGS 900	STEL CL			Category I: substances for which the localized effect has an assigned OEL or for substances with a sensitizing effect in respiratory passages.
2,2-Bis-(4-hydroxyphenyl)-propane (4,4'-Isopropylidenediphenol)	80-05-7	TRGS 900		5 mg/m3	1	Y
General limiting value of dust		TRGS 900		10 mg/m3	2	inhalable fraction
General limiting value of dust		TRGS 900		3 mg/m3	2	alveolar fraction
General limiting value of dust		TRGS 900	STEL CL			Category II: substances with a resorptive effect.

9. Physical and chemical properties

9.1 Information on basic physical and chemical properties:

Appearance:	Granular
Colour:	Different according to coloration
Odour:	Odorless
pH:	Not available
Softening point:	100°C - 200 °C
Upper/lower flammability or explosive limits:	Not applicable
Vapour pressure:	Not applicable
Density:	1.1 – 1.2 g/cm ³
Water solubility:	Practically insoluble
Auto-ignition temperature:	> 390 °C
Ignition temperature:	> 320 °C
Decomposition temperature:	>= 380 °C
Viscosity, dynamic:	Not applicable

9.2. Other information:

The indicated values do not necessarily correspond to the product specification. Please refer to the product information sheet or the technical information sheet for specification data

10. Stability and reactivity

10.1 Reactivity:	This information is not available.
10.2 Chemical stability:	Fumes evolved by overheating during improperly processing or by burning may be injurious to health.
10.3 Possibility of hazardous reactions:	If overheated, the melt may undergo exothermal decomposition in the air (increase in temperature, generation of smoke or fumes).
10.4 Conditions to avoid:	This information is not available.
10.5 Incompatible materials:	This information is not available.
10.6 Hazardous decomposition products:	Caused by smoldering and incomplete combustion toxic fumes mainly consisting of CO and CO ₂ may be developed. Under recommended processing conditions small amounts of emissions may occur.

10.7 The regulations for the substances listed below must be observed when processing this product, particularly if processing takes place at elevated temperatures.

	Index-No./ EC-No.	CAS-No.	Classification (1272/2008/CE)
acrylonitrile	608-003-00-4	107-13-1	Flam. Liq. 2 H225 Carc. 1B H350 Repr. 2 H361d Acute Tox. 3 Inhalative H331 Acute Tox. 3 Dermal H311 Acute Tox. 3 Oral H301 STOT SE 3 H335 Skin Irrit. 2 H315 Eye Dam. 1 H318 Skin Sens. 1 H317 Aquatic Chronic 2 H411
styrene	601-026-00-0	100-42-5	Flam. Liq. 3 H226 Acute Tox. 4 Inhalative H332 Asp. Tox. 1 H304 Eye Irrit. 2 H319 Skin Irrit. 2 H315 STOT SE 3 H335 STOT RE 1 Inhalative H372 Aquatic Chronic 3 H412 Repr. 2 H361d
1,3-butadiene	601-013-00-X	106-99-0	Flam.Gas 1 H220 Press. Gas Muta. 1B H340 Carc. 1A H350
4-inylcyclohexene	202-848-9	100-40-3	Carc. 2 H351 Flam. Liq. 2 H225 Skin Irrit. 2 H315 Asp. Tox. 1 H304 Repr. 2 H361 Aquatic Chronic 3 H412
Ethylbenzene	202-849-4	100-41-4	Flam. Liq. 2 H225 Asp. Tox. 1 H304 Acute Tox. 4 Inhalative H332 STOT RE 2 Inhalative H373 Aquatic Chronic 3 H412
phenol	604-001-00-2	108-95-2	Muta. 2 H341 Acute Tox. 3 Inhalative H331 Acute Tox. 3 Dermal H311 Acute Tox. 3 Oral H301 Skin Corr. 1B H314 Eye Dam. 1 H318 STOT RE 2 H373 Aquatic Chronic 2 H411
4-tert-butylphenol	604-090-00-8	98-54-4	Skin Irrit. 2 H315 Eye Dam. 1 H318 Repr. 2 H361f Aquatic Chronic 1 H410
chlorobenzene	602-033-00-1	108-90-7	Flam. Liq. 3 H226 Acute Tox. 4 Inhalative H332 Skin Irrit. 2 H315 Aquatic Chronic 2 H411
2,2-Bis-(4- hydroxyphenyl)- propane (4,4'- Isopropylidenediphenol)		80-05-7	Repr. 1B H360F STOT SE 3 Inhalative H335 Eye Dam. 1 H318 Skin Sens. 1 H317 Aquatic Chronic 2 H411

11. Toxicological information

11.1 Information on toxicological effects:

Acute toxicity:

ATE_{mix}(oral): Not available

ATE_{mix}(Dermal): Not available

ATE_{mix}(inhalation): Not available

Calcium chloride(CAS# 10043-52-4)

LD50(Oral, Rat): 2 301 mg/kg bw

LD50(Dermal, Rabbit): > 5 000 mg/kg bw

LC50(Inhalation, Rat): Not available

Skin corrosion/Irritation: Not classified

Serious eye damage/irritation: Not classified

Respiratory or skin sensitization: Not classified

Germ cell mutagenicity: Not classified

Carcinogenicity: Not classified

Reproductive toxicity: Not classified

STOT- single exposure: Not classified

STOT-repeated exposure: Not classified

Aspiration hazard: Not classified

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

12. Ecological information

Ecotoxicological studies of the product are not available.
Do not allow to escape into waterways, wastewater or soil.

- 12.1 Toxicity:** Not available.
- 12.2 Persistence and degradability:** Not available.
- 12.3 Mobility in soil:** Not available.
- 12.4 Results of PBT and vPvB assessment:** Not available.
- 12.5 Other adverse effects:** The product is practically insoluble in water. In view of its consistency and insolubility in water, no ecological problems are to be expected if the product is properly handled. The product is not readily biodegradable.

13. Disposal considerations

- 13.1 Waste treatment methods:** 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 set up within 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 carefully segregated according to type. None disposal into waste water.

14. Transport information

	Land transport (ADR/RID)	Inland waterways (ADN)	Sea transport (IMDG)	Air transport (ICAO/IATA)
UN number	Not regulated	Not regulated	Not regulated	Not regulated
UN Proper shipping name	Not regulated	Not regulated	Not regulated	Not regulated
Transport hazard Class(es)	Not regulated	Not regulated	Not regulated	Not regulated
Packing group	Not regulated	Not regulated	Not regulated	Not regulated
Environmental hazards	No	No	No	No
Special precautions for user	See section 6-8	See section 6-8	See section 6-8	See section 6-8
Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not regulated	Not regulated	Not regulated	Not regulated
Additional information	Not dangerous cargo. Keep dry.			

15 Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture, not water endangering

15.2 Chemical safety assessment YES NO

16. Other information

16.1 Full text of the hazard statements of the CLP classification

H220	Extremely flammable gas.
H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H301	Toxic if swallowed.
H304	May be fatal if swallowed and enters airways.
H311	Toxic in contact with skin.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H331	Toxic if inhaled.

H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H340	May cause genetic defects.
H341	Suspected of causing genetic defects.
H350	May cause cancer.
H351	Suspected of causing cancer.
H360F	May damage fertility.
H361	Suspected of damaging fertility or the unborn child.
H361d	Suspected of damaging the unborn child.
H361f	Suspected of damaging fertility.
H372	Causes damage to organs through prolonged or repeated exposure if inhaled.
H373	May cause damage to organs through prolonged or repeated exposure.
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.

16.1 Further information:

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

16.2 Notice to reader:

Employers should use this information only as a supplement to other information gathered by them, and should make independent judgment of suitability of this information to ensure proper use and protect the health and safety of employees. This information is furnished without warranty, and any use of the product not in conformance with this Safety Data Sheet, or in combination with any other product or process, is the responsibility of the user.