

HATCHBOX TPU 3D Printer Filament

HATCHBOX

Safety Data Sheet

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1. Product and Company Identification

1.1 Product identifiers

Product Name	HATCHBOX TPU 3D Printer Filament
Producer	HATCHBOX
Product Number	3D TPU
CAS-No.	Not available - mixture

1.2 Identified uses of the product and uses advised against

Identified Uses	3D printer filament, thermoplastic polymer
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1.3 Details of the chemical supplier

Company	HATCHBOX
Address	2675 Pomona Blvd Pomona, CA 91768 USA
Telephone:	+1 (909) 655-0163

1.4 Emergency phone number

Emergency phone number	+1 (800) 424-9300 (CHEMTREC Emergency Telephone, 24 hrs-a-day / 7 days-a-week)
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2. Hazards Identification

2.1 Classification of the substance or mixture according to GHS

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

1272/2008 class	Based on present data no classification and labelling is required according to Directive 1272/2008/EC and its amendments (CLP Regulation, GHS)
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Classification according to Directive 67/548/EEC or Directive 1999/45/EC

67/548/EEC class	According to present data no classification and labelling is required according to Directives 67/548/EEC
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1999/45/EC class	According to present data no classification and labelling is required according to Directives 1999/45/EC
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Information concerning particular hazards for human and environment

No particular hazards for human and environment.

Classification system

The classification is according to the latest editions and extended by company and literature data.

2.2 GHS Label elements, including precautionary statements

GHS pictograms	None
Signal word	None
Hazard statements	None
Precautionary statements	None

Labelling according to Regulation (EC) No 1272/2008

The product is classified and labelled according to the CLP regulation.

NFPA ratings (scale 0 – 4)



Health - 0
Fire - 0
Reactivity - 0

HMIS ratings (scale 0 – 4)

HEALTH	0
FLAMMABILITY	0
PHYSICAL HAZARD	0

Health - 0
 Fire/flammability - 0
 Reactivity/physical hazard - 0

2.3 Hazards not otherwise classified (HNOC) or not covered by GHS

Complete toxicity data are not available for this specific formulation.

Potential route of overexposure to this product may include eye and skin contact, and inhalation of excessive amounts of dust or heat-released vapors. Ingestion is not expected to be a significant route of exposure for this product under normal use conditions.

Product is a non-toxic solid material having minimal odor. Vapors and other heat-released air emissions may be irritating to the eyes, skin, and respiratory system. Under fire conditions, product will readily burn and emit a heavy, irritating smoke. Contact with molten material may cause serious thermal burns.

3. Composition/Information on Ingredients**3.1 Product mixture**

Synonyms	Thermoplastic polyurethane, thermoplastic polymer
Formula	Mixture
Molecular wt	Mixture
CAS-No.	Mixture
EC-No.	Mixture

Chemical Name	CAS-No.	EC-No.	Ingredient Percent
Thermoplastic polyurethane	n/a	n/a	n/a

Remarks	There are no additional hazardous ingredients greater than or equal to 1.0 wt% concentration or carcinogenic ingredients greater than or equal to 0.1 wt% concentration.
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4. First Aid Measures**4.1 Description of first aid measures**

General advice	Consult a physician. Show this safety data sheet to the doctor in attendance.
Skin contact	Keep away from open cuts and irritated skin. If skin has contact with molten material, place affected area under cold running water. Seek medical attention for removal of material from the affected area. Consult a physician if symptoms occur.
Eye contact	If dust or vapors contacts the eyes rinse thoroughly with plenty of water for at least 15 minutes and consult a physician. If molten material contacts eyes, rinse with water and seek medical attention immediately.
Inhalation	Move person to fresh air. Consult a physician if difficulties in breathing or other symptoms occur.
Ingestion	Rinse mouth with water and consult a physician if gastrointestinal or other symptoms occur.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms and effects	The most important known symptoms and effects are described in the labelling (see section 2.2) and in section 11.
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4.3 Indication of any immediate medical attention and special treatment needed

Other first aid	No data available
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5. Fire Fighting Measures**5.1 Suitable (and unsuitable) extinguishing media**

Suitable extinguishing media	Use alcohol-resistant foam, dry chemical or carbon dioxide. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
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5.2 Special hazards arising from the substance or mixture

Special hazards	Thermal decomposition can lead to release of irritating gases and vapors. Keep product and empty container away from heat and sources of ignition. Decomposition products may include the following materials: carbon dioxide, carbon monoxide.
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5.3 Advice for firefighters

Protective equipment

Wear self-contained breathing apparatus for firefighting if necessary.

6. Accidental Release Measures**6.1 Personal precautions, protective equipment, and emergency procedures**

Personal precautions

Avoid contact with skin and eyes. Avoid breathing vapors, mist or dust. Ensure adequate ventilation in areas where dust can accumulate. Remove all sources of ignition and evacuate personnel to safe areas. Dust can accumulate in low areas when dealing with large quantities. For personal protection see section 8.

6.2 Environmental precautions

Environmental precautions

Prevent runoff into sewers and drains. Recover as much of the material as possible. Prevent further leakage and safe to do so.

6.3 Methods and materials for containment and cleaning up

Methods for cleanup

Move containers from spill area. Prevent entry into sewers, water courses, basements or confined areas. Contain and collect spillage with a shovel or mechanical means and place in container for disposal according to local regulations (see Section 13). Prevent accumulation of vapours/ dust during clean up. Keep in suitable, closed containers for disposal. Contain spillage.

6.4 References to other sections

Other references

For disposal see section 13.

7. Handling and Storage**7.1 General hygiene considerations**

General hygiene

Avoid contact with eyes. Avoid inhalation of vapor or dust. Use local exhaust or general dilution ventilation to control exposure and dust within applicable limits. Keep away from high temperatures and sources of ignition. For precautions see section 2.2. Wash hands after use. Individuals with respiratory disease, including but not limited to asthma and bronchitis, or subject to eye irritation, should not be exposed to dust overexposures.

7.2 Precautions for safe handling

Safe handling precautions

Keep container tightly closed in a dry and well-ventilated place. Further processing of solid materials may result in the formation of combustible dusts. The potential for combustible dust formation should be taken into consideration before additional processing occurs. Keep away from high temperatures and potential sources of ignition. Non-combustible solids.

7.3 Conditions for safe storage, including any incompatibilities

Other storage conditions

Store product in a dry environment, away from strong bases and oxidizers. Apart from the uses mentioned in section 1.2 no other specific uses are stipulated.

8. Exposure Controls/Personal Protection**8.1 Control and exposure limits recommended by the chemical manufacturer**

OSHA standards

Contains no substances with occupational exposure limit values.

ACGIH TLV

Contains no substances with occupational exposure limit values.

NIOSH recommendations

Contains no substances with occupational exposure limit values.

8.2 Appropriate engineering controls

Engineering controls

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of day. Use adequate ventilation where dust forms to keep concentration under exposure control limits. Keep away from high temperatures and sources of ignition.

8.3 Individual protection measures, such as personal protective equipment

Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multipurpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Eye/face protection

Safety glasses with side-shields conforming to EN166 are recommended. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166 (EU).

Hand protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Body protection

Wear impervious clothing. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

9. Physical and Chemical Properties

9.1 Information on basic physical and chemical properties

a) Appearance	Solid, various colors
b) Odor	Slight odor
c) Odor threshold	No data available
d) pH	No data available
e) Melting/freezing point	No data available
f) Boiling point	No data available
g) Flash point	No data available
h) Evaporation rate	No data available
i) Flammability (solid, gas)	No data available
j) Upper/lower flammability or explosive limits	Upper (UEL): No data available Lower (LEL): No data available
k) Vapor pressure	No data available
l) Vapor density	No data available
m) Relative density	No data available
n) Water solubility	No data available
o) Partition coefficient octanol/water	No data available
p) Auto-ignition temp	No data available
q) Decomposition temp	No data available
r) Viscosity	No data available

10. Stability and Reactivity

10.1 Reactivity

Reactivity No data available

10.2 Chemical stability

Chemical stability Stable under ordinary conditions of use and storage.

10.3 Possibility of hazardous reactions

Hazardous reactions No data available

10.4 Conditions to avoid

Conditions to avoid Contact with incompatible chemicals and exposure to extremely high temperatures.

10.5 Incompatible materials

Incompatible materials Strong oxidizers, strong acids, acid chlorides, acid anhydrides, chloroformates, or strong reducing agents.

10.6 Hazardous decomposition products

Hazardous products None under normal processing. In the event of fire, see section 5.

11. Toxicological Information

11.1 Information on toxicological effects

Acute toxicity

Acute oral toxicity No data available

Acute intravenous toxicity No data available

Acute dermal toxicity No data available

Acute inhalation toxicity No data available

Skin corrosion/irritation

Skin corrosion irritation May cause irritation to open cuts and irritated skin

Serious eye damage/eye irritation

Eye damage/eye irritation	Vapors or flakes may cause irritation to eyes
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Respiratory or skin sensitization

Respiratory sensitizer	No data available
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Skin sensitizer	No data available
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Germ cell mutagenicity

Mutagenicity	No data available
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Carcinogenicity

Carcinogenicity	No data available
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Suspected cancer agent

ACGIH	No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen.
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NTP	No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen.
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OSHA	No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen.
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IARC	No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen.
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Reproductive toxicity

Reproductive toxicity	No data available
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Aspiration hazard

Aspiration hazard	No data available
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12. Ecological Information**12.1 Ecotoxicity (aquatic and terrestrial)**

Ecotoxicity	No data available
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12.2 Persistence and degradability

Degradability	No data available
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12.3 Bioaccumulation potential

Bioaccumulation	No data available
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12.4 Mobility in soil

Mobility in soil	No data available
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12.5 Results of PBT and vPvB assessment

PBT/vPvB assessment	Not available as chemical safety assessment not required/not conducted.
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13. Disposal Considerations**13.1 Waste treatment methods**

Waste treatment disposal	For consumer use, dispose of in trash can. Waste disposal must be in accordance with appropriate Federal, State, and local regulations.
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14. Transport Information**DOT**

Not dangerous goods.

IMDG

Not dangerous goods.

IATA

Not dangerous goods.

15. Regulatory Information

15.1 Safety, health, and environmental regulations specific to the product or mixture

SARA 302 Components	No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.
SARA 313 Components	This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.
SARA 311/312 Hazards	No hazards.
TSCA	All components of this product are on the TSCA inventory or are exempt from TSCA inventory requirements.
Canada DSL	All components of this product are on the Canada Domestic Substance List or are exempt from DSL requirements.
WHMIS classification	No ingredients are hazardous according to the CPR criteria.
CA Prop. 65 components	This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.
Hazard symbols	None
Risk phrases	None
Safety phrases	None
International lists	Australia - AICS - The materials are listed or exempted Canada - The materials are listed or exempted China - IECSC - The materials are listed or exempted Europe - EINECS - The materials are listed or exempted Japan - ENCS/ISHL - The materials are listed or exempted Malaysia - The materials are listed or exempted New Zealand - NZIoC - The materials are listed or exempted Philippines - PICCS - The materials are listed or exempted Korea - KECI - The materials are listed or exempted Taiwan - NECI - The materials are listed or exempted Turkey - The materials are listed or exempted United States - The materials are listed or exempted

16. Other Information

HMIS Rating	Health hazard: 0 Flammability: 0 Physical Hazard 0
NFPA Rating	Health hazard: 0 Fire Hazard: 0 Reactivity Hazard: 0
Revision Date	3 January 2017

The information contained herein is based on data considered accurate. However, no warranty is expressed or implied regarding the accuracy of these data or the results to be obtained from the use thereof. HATCHBOX assumes no responsibility for injury to the vendee or third persons proximately caused by the material if reasonable safety procedures are not adhered to as stipulated in the data sheet. Additionally, HATCHBOX assumes no responsibility for injury to vendee or third persons proximately caused by use of the material even if reasonable safety procedures are followed. Furthermore, vendee assumes the risk in his use of the material.

Abbreviations and acronyms	IMDG - International Maritime Code for Dangerous Goods IATA - International Air Transport Association GHS - Globally Harmonized System of Classification and Labelling of Chemicals PBT - Persistent, bioaccumulative and toxic assessment vPvB - Very persistent and very bioaccumulative assessment ACGIH - American Conference of Governmental Industrial Hygienists NIOSH - National Institute for Occupational Safety and Health TLV - Threshold Limit Values CAS - Chemical Abstracts Service (division of the American Chemical Society) NFPA - National Fire Protection Association HMIS - Hazardous Materials Identification System CFR - Code of Federal Regulations SARA - Superfund Amendments and Reauthorization Act DOT - US Department of Transportation
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EC50 - Half maximal effective concentration
LD50 - Median lethal dose
LC50 - Median lethal concentration
SDS - Safety Data Sheet
PEL - Permissible Exposure Limit
TSCA - Toxic Substances Control Act