Safety Data Sheet

according to Regulation (EC) No 1907/2006 (REACH),
GHS Rev 04 (2011): US, OSHA, CMA, ANSI
WHS Regulations Australia,
JIS Z 7253 (2012): Japan

Cube® PLA plastic / CubeX™ PLA plastic

Revision Date: 12 December 2013

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

1.1 Identification of the substance or preparation: Cube® PLA plastic

1.2 Use of the substance / preparation: For use with the 2nd and 3rd generation Cube® 3D Printers
And the CubeX™ 3D Printer

1.3 Company/undertaking identification:

Company Name Address	3D Systems Japan K.K. Yebisu Garden Place Tower 27F 4-20-3, Ebisu, Shibuya-ku, Tokyo 50-6027 Japan
Telephone No.	03-5798-2500
Chemical Emergency	03-4520-9637 - Chemtrec

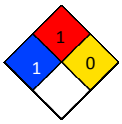
2. HAZARDS IDENTIFICATION

2.1 Classification:
Not classified according to GHS, Regulation (EC) No. 1272/2008, HazCom 2012.

2.2 Label Elements
Regulation (EC) No, 1272/2008:

Hazard pictograms and signal word: None

Hazard statements: None



NFPA Ratings
0 = Minimal
1 = Slight
2 = Moderate
3 = Serious
4 = Severe

Hazardous Materials Identification System (HMIS):
(Degree of hazard: 0 = low, 4 = extreme);

Health	**1**
Flammability	**1**
Physical Hazards	**0**

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Preparation related information

Description: Biopolymer

3.2 Dangerous components

Chemical name	CAS-No	EC-No	%	Classification	
				Regulation (EC) 1272/2008	Regulation 67/548/EEC, 1999/45/EC
Polylactide resin	9051-89-2	polymer	80-90%	-	-

4. FIRST AID MEASURES

4.1 In case of inhalation: Fumes released from heated material may cause irritation to respiratory system. Move affected person to fresh air. If respiratory irritation occurs, seek medical attention immediately.

4.2 In case of skin contact: Flush skin with plenty of soap and water.

4.3 In case of eye contact: Flush eyes with plenty of water.

4.4 In case of ingestion: If ingested, drink plenty of water. Do not induce vomiting.

5. FIRE-FIGHTING MEASURES

5.1 Suitable extinguishing media: Water mist, dry chemical, carbon dioxide, or appropriate foam.

5.2 Special exposure hazards arising from the substance or preparation itself, combustion products, resulting gases: Burning produces noxious and toxic fumes. Thermal decomposition products can include CO_2, CO and aldehydes.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions: Wear appropriate protective equipment and clothing.

6.2 Environmental precautions: Avoid discharge to sewer system.

6.3 Methods for cleaning up: Sweep up. Place all waste in an appropriate container for disposal.

7. HANDLING AND STORAGE

7.1 Handling: Avoid contact with skin and eyes. Do not allow to enter drains or watercourses.

7.2 Storage: Store sealed in the original container at room temperature.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Exposure limit values:
General Product Information: No occupational exposure limits (PEL/TWA) have been established for this product.

8.2 Exposure controls
Technical measures to prevent exposure: Good general ventilation should be sufficient for normal operation.
Personal protection equipment: If product is used as intended, no personal protective equipment is required.
Respiratory protection: NA
Eye protection: NA
Body protection: NA

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Appearance:

Physical state: Solid filament
Colour: Black, Blue, Brown, glow-in-the-dark Blue, glow-in-the-dark Green, Green, Magenta, Neon Green, Neon Orange, Purple, Red, Silver, Tan, Teal, White, Yellow
Odour: Odourless

9.2 Important health, safety and environmental information

pH (20 °C):	NA
Vicat Softening Point (°C):	NA
Boiling point/range (°C):	NA
Flash point (°C):	> 207°C
Ignition temperature (°C):	NA
Vapour pressure (°C):	NA
Density (g/cm3):	1.2
Bulk density (kg/m3):	NA
Water solubility (20°C in g/l):	Insoluble
Partition coefficient:	NA
n-Octanol/Water (log Po/w):	NA
Viscosity, dynamic (mPa s):	NA
Dust explosion hazard:	NA
Explosion limits:	NA

10. STABILITY AND REACTIVITY

10.1 Conditions to avoid: Temperatures over the decomposition temperature of 250° C. These temperatures are not encountered in normal operations.

10.2 Hazardous decomposition products: At high temperatures or upon burning, thermal decomposition products including but not limited to carbon monoxide and carbon dioxide may be emitted.

11. TOXICOLOGICAL INFORMATION

11.1 Toxicokinetics, metabolism and distribution: NA

11.2 Acute effects (toxicity tests)
Acute toxicity: NA
Oral LD50: NA
Irritant and corrosive effects: NA
Irritation to respiratory tract: NA
Sensitisation: NA

11.3 Experiences made in practice
Observations relevant to classification: -
Other observations:-

11.4 General remarks:
Carcinogenicity: None of this product's components are listed by ACGIH, IARC, OSHA, NIOSH, or NTP

12. Ecological information

12.1 Ecotoxicity: Not expected to be acutely toxic, but if ingested by waterfowl or aquatic life, may mechanically cause adverse effects.

12.2 Mobility: No bioconcentration is expected because of the high molecular weight (MW>1000). In the terrestrial environment, material is expected to remain in the soil. In the aquatic environment material will sink and remain in the sediment.

12.3 Persistence and degradability: This water insoluble polymeric solid is expected to be inert in the environment. Surface degradation is expected with exposure to sunlight. No appreciable biodegradation is expected.

12.4 Results of PBT assessment: No information available for product

12.5 Other adverse effects: No information available for product

13. DISPOSAL CONSIDERATIONS

13.1 Appropriate disposal / Product: Do not dump into any sewers, on the ground, or into any body of water. All disposal methods must be in compliance with all Federal, State/Provincial and local laws and regulations. Regulations may vary in different locations. Waste characterizations and compliance with appliance laws are the responsibility solely of the waste generator.
For unused & uncontaminated product, the preferred options include sending to a licensed, permitted recycler, reclaim, incinerator or other thermal destruction device.

13.2 Waste codes / waste designations according to EWC / AVV:

13.3 Appropriate packaging: -

13.4 Additional information: -.

14. TRANSPORT INFORMATION

14.1 Land transport (ADR/RID/GGVSE): Not regulated

14.2 Sea transport (IMDG-Code/GGVSee): Not regulated

14.3 Air transport (ICAO-IATA/DGR): Not regulated

15. REGULATORY INFORMATION

15.1 EU regulations
EINEC/ELINCS/NLP: All materials are listed
REACH Annex XVII: None listed

15.2 US FEDERAL
TSCA: All materials are listed on the TSCA Inventory or are not subject to TSCA requirements**:**
California Proposition 65: This product does not contain chemicals which are known to the state of California to cause cancer, birth, or any other reproductive defects.

15.3 Australian regulations
SUSDP, Industrial Chemicals Act 1989:
Australian Inventory of Chemical Substances, AICS: Listed

15.4 Japanese regulations
Chemical Risk Information platform (CHRIP): Listed

16. OTHER INFORMATION

SDS Creation Date: .....December 12, 2013
SDS Revision #:.....NA
SDS Revision Date: .....NA
Reason for Revision:.....NA

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