



Safety Data Sheet
 according to Regulation (EC) No 1907/2006 and 1272/2008,
 Hazard Communication Standard 29 CFR 1910 (USA),
 WHS Regulations Australia,
 JIS Z 7253 (2012) Japan

zp®151 Powder
 Revision Date: July 18, 2016

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

1.1 Identification of the substance or preparation: zp®151

1.2 Use of the substance / preparation: For use with ZPrinter® 3D inkjet printer

1.3 Company/undertaking identification:

3D Systems, Inc.
 333 Three D Systems Circle
 Rock Hill, South Carolina U.S.A.
 Phone: 803.326.3900 or
 Toll-free Phone: 800.793.3669
 e-mail: moreinfo@3dsystems.com
 Chemical Emergency:
 800.424.9300 – Chemtrec

3D Systems Europe Ltd.
 Mark House, Mark Road
 Hemel Hempstead
 Herts HP2 7 United Kingdom
 Phone: +44 144-2282600
 e-mail: moreinfo@3dsystems.com
 Chemical Emergency:
 +1 703.527.3887 - Chemtrec

3D Systems / Australia
 5 Lynch Street
 Hawthorn, VIC 3122
 +1 03 9819-4422
 e-mail: moreinfo@3dsystems.com
 Chemical Emergency:
 +(61) 29037.2994 – Aus Chemtrec

2. HAZARDS IDENTIFICATION

2.1 Classification:

Not classified according to GHS, Regulation (EC) No. 1272/2008, HazCom 2012, Australian Dangerous Goods Code

2.2 Label Elements

Regulation (EC) No, 1272/2008:

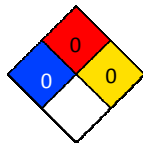
Hazard pictograms and signal word: None

Hazard statements: None

Precautionary statements:

When mixed with water, this material hardens. **DO NOT** attempt to make a cast enclosing any part of the body using this material.

P232: Protect from moisture
 P402: Store in a dry place



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 **0**
 Flammability **0**
 Physical Hazards **0**

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Preparation related information

Description: Mixture

3.2 Hazard ingredients:

Chemical name	CAS-No	EC-No	%	Classification	
				Regulation (EC) 1272/2008	Regulation 67/548/EEC, 1999/45/EC
Calcium sulfate hemihydrate	10034-76-1	231-900-3	80-90		



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4. FIRST AID MEASURES

4.1 In case of inhalation: 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: Thermal decomposition products can include sulphur oxides, calcium oxide, CO₂ and CO.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions: Avoid dust formation. Do not breathe vapors/mist/gas.

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: Provide adequate ventilation during dust formation.

7.2 Storage: Store sealed in the original container at room temperature. Keep this material in a cool, dry, well-ventilated place.

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.
Component Analysis:

Component	Component Manufacturer IEL (Internal Exposure Limit)
Calcium sulphate hemihydrate	6mg/m ³

8.2 Exposure controls

Technical measures to prevent exposure: Use local exhaust ventilation.

Instructual measures to prevent exposure: When using, do not eat, drink or smoke. Wash hands after handling and before eating, smoking and using the lavatory and at the end of the day.

Personal protection equipment:

Hand protection: Use impervious nitrile gloves.

Eye protection: Wear safety glasses or chemical goggles.

Body protection: Use apron and closed shoes.



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9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Appearance:

Physical state: Powder

Color: white

Odor: mild

9.2 Important health, safety and environmental information

pH (20 °C):	NA
Melting point/range (°C):	1450°C
Boiling point/range (°C):	NA
Flash point (°C):	NA
Ignition temperature (°C):	NA
Vapour pressure (°C):	NA
Density (g/cm³):	2.6-2.7
Bulk density (kg/m³):	NA
Water solubility (20 °C in g/l):	0.83% (3°C)
Viscosity, dynamic (mPa s):	NA
Dust explosion hazard:	NA
Explosion limits:	NA

10. STABILITY AND REACTIVITY

10.1 Conditions to avoid: Avoid wet/humid environment. Avoid dust formation.

10.2 Materials to avoid: Oxidizing materials, acids, strong bases, water, high humidity.

10.3 Hazardous decomposition products: Sulphur oxides, calcium oxide, carbon dioxide and carbon monoxide can be released at high temperatures or upon burning.

11. TOXICOLOGICAL INFORMATION

11.1 Toxicokinetics, metabolism and distribution: NA

11.2 Acute effects (toxicity tests)

Component	LD ₅₀ Oral	LD ₅₀ Dermal
Calcium sulphate hemihydrate	> 5000mg/kg (rats)	NA

11.3 General remarks:

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

12. Ecological information

12.1 Ecotoxicity: The aquatic toxicity of the product is unknown. No data are available for the components of this product.

12.2 Mobility: No information available for product.

12.3 Persistence and degradability: No information available for product.

12.4 Results of PBT assessment: No information available for product

12.5 Other adverse effects: No information available for product



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13. DISPOSAL CONSIDERATIONS

Appropriate disposal / Product: Reduce waste by attempting to utilize product completely. Dispose of this container and its contents in accordance with all local, state, and federal regulations.

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
Industrial Health and Safety Law	not applicable
Hazardous material	not applicable
Organic solvent poison prevention rule	not applicable
Ordinance on prevention of hazard due to specified chemical substances	not applicable
Lead Poisoning Prevention Rule	not applicable
Poison and Deleterious Substance Control law	not applicable
PRTR and Promotion of Chemical Management law (PRTR Law)	no listed components
Fire Services Act	not applicable
Explosives Law	not applicable
High pressure gas safety law	not applicable
Export Trade Control Order	not applicable
Waste Disposal and Public Cleaning Law	not applicable

16. OTHER INFORMATION

SDS Creation Date: March 22, 2013

SDS Revision #: 03-A

SDS Revision Date: July 18, 2016

Reason for Revision: Update header, section 1, 15.

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