



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[®] 14 powder

Revision Date: August 3, 2015

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

1.1 Identification of the substance or preparation: zp14 powder

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

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
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
703.527.3887 - Chemtrec (U.S.)

2. HAZARDS IDENTIFICATION

2.1 Classification:

Not classified according to GHS, Regulation (EC) No. 1272/2008, HazCom 29 CFR 1910

2.2 Label Elements

Regulation (EC) No, 1272/2008:

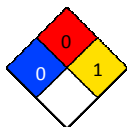
Hazard pictograms and signal word: None

Hazard statements: None

WARNING! MAY FORM COMBUSTIBLE DUST CONCENTRATIONS IN AIR

Precautionary statements:

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 **1**

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Preparation related information

Description: Mixture of cellulose and starch

3.2 Hazard ingredients:

Chemical name	CAS-No	EC-No	%	Classification	
				Regulation (EC) 1272/2008	Regulation 67/548/EEC, 1999/45/EC
Cellulose	9004-34-6	232-674-9	20-30	NC	NC



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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

Explosion: Avoid generating dust. Fine dust dispersed in air in sufficient concentrations and in the presence of an ignition source is a potential dust explosion hazard.

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 CO₂ and CO.

6. ACCIDENTAL RELEASE MEASURES

Dust deposits should not be allowed to accumulate on surfaces, as they may form an explosive mixture if they are released into the atmosphere in sufficient concentration.

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: Minimize dust generation and accumulation. Routine housekeeping should be instituted to ensure that dusts do not accumulate on surfaces. Dry powders can build static electricity charges when subjected to the friction of transfer and mixing operations. Provide adequate precautions, such as electrical grounding and bonding, or inert atmospheres. 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



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8.2 Exposure controls

Technical measures to prevent exposure: It is recommended that all dust control equipment such as local exhaust ventilation and material transport systems involved in handling of this product contain explosion relief vents, an explosion suppression system, or an oxygen-deficient environment. Ensure that the dust-handling systems are designed in a manner to prevent the escape of dust into the work area. Use only appropriately classified electrical equipment and powered industrial trucks.

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.

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):	7.0
Melting point/range (°C):	NA
Boiling point/range (°C):	NA
Flash point (°C):	NA
Ignition temperature (°C):	230
Vapour pressure (°C):	NA
Density (g/cm³):	0.5
Bulk density (kg/m³):	NA
Water solubility (20 °C in g/l):	insoluble
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: 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
Cellulose	NA	NA

11.3. General remarks:

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



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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

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

SARA 302 EHS List (40 CFR 355 Appendix A): None listed

SARA 313 (40 CFR 372.65): None listed

CERCLA (40 CFR 302.4): None listed

15.3. Australian regulations

SUSDP, Industrial Chemicals Act 1989:

Australian Inventory of Chemical Substances, AICS: Listed

15.4 Japanese regulations

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 not applicable

specified chemical substances not applicable

Lead Poisoning Prevention Rule not applicable

Poison and Deleterious Substance Control law not applicable

PRTR and Promotion of Chemical not applicable

Management law (PRTR Law)

Fire Services Act not applicable

Explosives Law not applicable

High pressure gas safety law not applicable

Export Trade Control Order applicable

Waste Disposal and Public Cleaning Law not applicable



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16. OTHER INFORMATION

SDS Creation Date: September, 2010
SDS Revision #: -00-A
SDS Revision Date: August 3, 2015
Reason for Revision: GHS update

www.3dsystems.com

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