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

1.1 Identification of the mixture: VisiJet® M3-X

1.2 Use of the preparation: For use with ProJet® SD, HD, HD+, HD Max, 3500, 3510 and 3600 Professional 3D 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
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

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

3D Systems / Australia
5 Lynch Street
Hawthorn, VIC 3122

2. HAZARDS IDENTIFICATION


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

Precautionary statements:

P302+350: If on skin, wash with soap and water
P305+351+338: If in eyes, rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing
P410+403: Protect from sunlight. Store in a well-ventilated place
P501: Dispose of contents/container in accordance with local/regional regulations

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Chemical characterization:
Description: Organic mixture

3.2 Dangerous components:

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>CAS-No</th>
<th>EC-No</th>
<th>%</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phenyl bis(2,4,6-trimethyl benzoyl)- phosphine oxide</td>
<td>162881-26-7</td>
<td>423-340-5</td>
<td>0.1-0.5</td>
<td>Skin Sens.1, H317 Aqu. Chron. 4, H 413, Xi, R43, 53</td>
</tr>
</tbody>
</table>
4. FIRST AID MEASURES

4.1 General Information: Ensure that eyewash stations and safety showers are close to the workstation location.

4.2 In case of inhalation: Move affected person to fresh air. If respiratory irritation occurs, if breathing becomes difficult seek medical attention immediately.

4.3 In case of skin contact: Immediately flush skin with plenty of soap and water. Get medical attention if symptoms occur.

4.4 In case of eye contact: Immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention if symptoms persist.

4.5 In case of ingestion: If ingested, drink plenty of water and seek immediate medical attention. Do not induce vomiting.

5. FIRE-FIGHTING MEASURES

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

5.2 Extinguishing media which must not be used for safety reasons: High volume water jet.

5.3 Special exposure hazards arising from the substance or preparation itself, combustion products, resulting gases: Thermal decomposition products can include CO₂, CO, NOₓ and smoke.

5.4 Special protective equipment for fire-fighters: Wear full protective clothing, including helmet, self-contained positive-pressure or pressure demand breathing apparatus, protective clothing and facemask.

5.5 Additional information: Move container from area if it can be done without risk. Cool containers with water spray. Avoid inhalation of material or combustion by-products.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions: Keep unnecessary personnel away. Wear appropriate protective equipment and clothing.

6.2 Environmental precautions: Stop the flow of material. Ventilate contaminated area. Eliminate sources of ignition. In case of contamination of aquatic environment inform local authorities.

6.3 Methods for cleaning up: Wear appropriate protective equipment and clothing. Absorb spillage with suitable absorbent materials. Place all waste in an appropriate container for disposal. The material and its container must be disposed of as hazardous waste. Keep away from sources of ignition.

7. HANDLING AND STORAGE

7.1 Handling: Provide adequate ventilation. Use suitable protective equipment. Avoid contact with skin and eyes. Do not breathe vapors or mist. Avoid ignition sources. Do not allow to enter drains or watercourses.

7.2 Storage: Store sealed in the original container at room temperature. Keep this material indoors in a cool, dry, well ventilated place. Store out of direct sunlight or UV light sources. Storage Temperature: below 35 °C / 95 °F. Storage class 10, environmentally hazardous liquids.

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:
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:**
- **Respiratory protection:** If ventilation cannot effectively keep vapor concentrations below established limits, appropriate certified respiratory protection must be provided.
- **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:** soft solid to paste
- **Colour:** Colorless
- **Odour:** Mild

9.2 Important health, safety and environmental information

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>pH (20 °C)</td>
<td>NA</td>
</tr>
<tr>
<td>Melting point/range (°C)</td>
<td>55-65</td>
</tr>
<tr>
<td>Boiling point/range (°C)</td>
<td>NA</td>
</tr>
<tr>
<td>Flash point (°C)</td>
<td>179 °C (COC)</td>
</tr>
<tr>
<td>Ignition temperature (°C)</td>
<td>NA</td>
</tr>
<tr>
<td>Vapour pressure (°C)</td>
<td>NA</td>
</tr>
<tr>
<td>Density (g/cm3)</td>
<td>1.1</td>
</tr>
<tr>
<td>Bulk density (kg/m3)</td>
<td>NA</td>
</tr>
<tr>
<td>Water solubility (20°C in g/l)</td>
<td>slightly soluble</td>
</tr>
<tr>
<td>Partition coefficient</td>
<td>NA</td>
</tr>
<tr>
<td>n-Octanol/Water (log Po/w)</td>
<td>NA</td>
</tr>
<tr>
<td>Viscosity, dynamic (mPa s)</td>
<td>13 (80°C)</td>
</tr>
<tr>
<td>Dust explosion hazard</td>
<td>NA</td>
</tr>
<tr>
<td>Explosion limits</td>
<td>NA</td>
</tr>
</tbody>
</table>

10. STABILITY AND REACTIVITY

10.1 Conditions to avoid: Avoid exposure to heat and light. Take necessary actions to avoid static electricity discharge.

10.2 Materials to avoid: Oxidizing materials, strong acids and strong bases

10.3 Hazardous decomposition products: Carbon dioxide, carbon monoxide and other toxic fumes 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)

<table>
<thead>
<tr>
<th>Component</th>
<th>LD$_{50}$ Oral</th>
<th>LD$_{50}$ Dermal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phenylbis (2,4,6-trimethyl benzoyl)-phosphine oxide</td>
<td>&gt;2000 mg/kg</td>
<td>&gt;2000 mg/kg</td>
</tr>
</tbody>
</table>
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. Prevent contamination of soil, drains and surface waters.

<table>
<thead>
<tr>
<th>Component</th>
<th>Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phenylbis (2,4,6-trimethyl benzoyl)-phosphine oxide</td>
<td>EC50 &gt; 1.175 mg/L 48 hour (Daphnia magna)</td>
</tr>
<tr>
<td></td>
<td>LC50 &gt; 0.09 mg/L 96 hour (Zebra fish)</td>
</tr>
</tbody>
</table>

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

13.1 Appropriate disposal / Product: Do not contaminate drains, soil or surface waters with this material or its container. Reduce waste by attempting to utilize product completely. Dispose of this container and its contents in accordance with all local, state, and federal regulations. Do not reuse or refill.

13.2 Waste codes / waste designations according to EWC / AVV: 070208

13.3 Appropriate packaging: NA

13.4 Additional information: Prior to disposal 3D Systems recommends consulting an approved waste disposal firm to ensure regulatory compliance.

14. TRANSPORT INFORMATION

14.1 Land transport (ADR/RID/GGVSE): Not Regulated
Official transport designation:
Class:
Classification Code:
UN-No.:
Packing group:
Hazard label:
Tunnel restriction code:
Special provisions:

14.2 Sea transport (IMDG-Code/GGVSee): Not Regulated
Proper Shipping Name:
Class:
UN-No.:
Packing group:
EmS:
Marine Pollutant:
Special provisions:
14.3 Air transport (ICAO-IATA/DGR): Not Regulated
Proper Shipping Name:
Class:
UN-No.:
Packing group:
Special provisions:

15. REGULATORY INFORMATION

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

15.2 National EU regulations
Wassergefährdungsklasse (water hazard class, Germany): WGK 2: Hazard to waters

15.3 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

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

15.5 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 no listed components
Fire Services Act Category 4, Class 3, oil
Explosives Law not applicable
High pressure gas safety law not applicable
Export Trade Control Order not applicable
Waste Disposal and Public Cleaning Law Applicable. Before disposal, consult an approved waste disposal operative to ensure regulatory compliance.

16. OTHER INFORMATION

16.1 Relevant Hazard Statements (number and full text) referred to in sections 2 and 3 (according to (EC) No. 1272/2008):
Skin Sens 1, H317: Skin sensitization, category 1, H317: May cause an allergic skin reaction
Aqu. Chron. 4, H 413, Aquatic environment- long term hazard, category 4, H413 : May cause long lasting harmful effects to aquatic life

Relevant R-Phrases (number and full text) referred to in sections 2 and 3:
R43: May cause sensitisation by skin contact
R53: May cause long-term adverse effects in the aquatic environment
16.2 Further information:
SDS Creation Date:......November 30, 2012
SDS Revision #: ............-03-A
SDS Revision Date:......October 3, 2016
Reason for Revision: .....Update Sections 1, 15.
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800.793.3669 (Toll-free in the US GMT-07:00; N. America, Mon – Fri, 6:00 a.m. to 6 p.m.)
803.326.3900 (Outside the U.S. GMT-07:00; N. America, Mon – Fri, 6:00 a.m. to 6 p.m.)
+44 144-2282600 (Europe GMT+01:00; Mon – Fri, 08:00 a.m. - 17:00 p.m. MEZ)

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