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

1.1 Identification of the mixture: FabPro JewelCast GRN

1.2 Use of the preparation: For use with FabPro™ systems

1.3 Company/undertaking identification:

<table>
<thead>
<tr>
<th>Company/Undertaking</th>
<th>Address</th>
<th>Phone</th>
<th>Email</th>
</tr>
</thead>
<tbody>
<tr>
<td>3D Systems, Inc.</td>
<td>333 Three D Systems Circle, Rock Hill, South Carolina U.S.A.</td>
<td>803.326.3900 or Toll-free 800.793.3669</td>
<td><a href="mailto:moreinfo@3dsystems.com">moreinfo@3dsystems.com</a></td>
</tr>
<tr>
<td>3D Systems Europe Ltd.</td>
<td>Mark House, Mark Road, Hemel Hempstead, Herts HP2 7 United Kingdom</td>
<td>+44 144-2282600</td>
<td><a href="mailto:moreinfo@3dsystems.com">moreinfo@3dsystems.com</a></td>
</tr>
<tr>
<td>3D Systems / Australia</td>
<td>5 Lynch Street, Hawthorn, VIC 3122</td>
<td>+61 03 9819-4422</td>
<td><a href="mailto:moreinfo@3dsystems.com">moreinfo@3dsystems.com</a></td>
</tr>
<tr>
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<td>5 Lynch Street, Hawthorn, VIC 3122</td>
<td>+61 03 9819-4422</td>
<td><a href="mailto:moreinfo@3dsystems.com">moreinfo@3dsystems.com</a></td>
</tr>
</tbody>
</table>

Chemical Emergency:
- 3D Systems: 800.424.9300 – Chemtrec
- 3D Systems Europe Ltd.: +44 144-2282600 – Chemtrec
- 3D Systems / Australia: +61 29037.2994 – Aus Chemtrec

2. HAZARDS IDENTIFICATION

2.1 Classification:


<table>
<thead>
<tr>
<th>Hazard category</th>
<th>Category</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reproductive toxicity</td>
<td>2</td>
<td>H361f</td>
</tr>
</tbody>
</table>

2.2 Label Elements

Regulation (EC) No, 1272/2008:

Hazard pictograms and signal word:

GHS08

Signal word: Warning

Hazard determining components of labelling: Diphenyl (2,4,6-trimethyl-benzoyl)phosphine oxide

Hazard statements:

H361f: Suspected of damaging fertility or the unborn child

Precautionary statements:

P201: Obtain special instructions before use.
P202: Do not handle until all safety precautions have been read and understood.
P264: Wash skin thoroughly after handling.
P273: Avoid release to the environment.
P280: Wear protective gloves, protective clothing, eye protection.
P302+352: If on skin, wash with plenty of soap and water.
P304+340: IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305+351+338: If in eyes, rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.
P308+313: If exposed: Call a POISON CENTER or doctor/physician.
P312: Call a POISON CENTER/ doctor if you feel unwell.
P333+P313: If skin irritation or rash occurs: Get medical advice/attention.
P362: Take off contaminated clothing.
P363: Wash contaminated clothing before reuse.
P410+403: Protect from sunlight. Store in a well-ventilated place.
P501: Dispose of contents/container in accordance with local/regional regulations.
1.

2.

3.

4.

5.

6.
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. Consult expert immediately.

6.2 Environmental precautions: Stop the flow of material, if this is without risk. 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 liquid

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:

<table>
<thead>
<tr>
<th>Component</th>
<th>Component Manufacturer IEL (Internal Exposure Limit)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diphenyl (2,4,6-trimethylbenzoyl)phosphine oxide</td>
<td>3.5 mg/m³</td>
</tr>
</tbody>
</table>

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: Liquid
Colour: Green
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>NA</td>
</tr>
<tr>
<td>Boiling point/Range (°C):</td>
<td>NA</td>
</tr>
<tr>
<td>Flash point (°C):</td>
<td>&gt;200 °C</td>
</tr>
<tr>
<td>Ignition temperature (°C):</td>
<td>NA</td>
</tr>
<tr>
<td>Vapour pressure (°C):</td>
<td>&lt;0.1 mm Hg</td>
</tr>
<tr>
<td>Density (g/cm3):</td>
<td>1.06</td>
</tr>
<tr>
<td>Bulk density (kg/m3):</td>
<td>NA</td>
</tr>
<tr>
<td>Water solubility (20°C in g/l):</td>
<td>insoluble</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>240-300 cP (25°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>LD50 Oral</th>
<th>LD50 Dermal</th>
<th>LC50 (Inhalation)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diphenyl (2,4,6-trimethyl-benzoyl) phosphine oxide</td>
<td>&gt; 5000 mg/kg</td>
<td>&gt;2000 mg/kg</td>
<td></td>
</tr>
</tbody>
</table>

Irritation to respiratory tract: irritating
Skin irritation: irritating
Eye irritation: irritating
Sensitisation: Causes sensitisation

11.3 Experiences made in practice
Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.

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: The aquatic toxicity of the product is unknown; however based on components, it is predicted that this material may be harmful to aquatic organisms or cause long-term adverse effects in the aquatic environment. Prevent contamination of soil, drains and surface waters.

<table>
<thead>
<tr>
<th>Component</th>
<th>Data</th>
</tr>
</thead>
</table>
| Diphenyl (2,4,6-trimethylbenzoyl) phosphine oxide | EC50 – 3.53mg/l (daphnia)  
LC50 (48h) – 6.53 mg/l (oryzias latipes) |

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, H 317- Skin sensitization, category 1, H317: May cause an allergic skin reaction
Repr.2, H361f: Reproductive toxicity, category 2, H 361f: Suspected of damaging fertility
Aqu.Chron. 2, H411: Aquatic environment – long-term hazard, category 2, H411: Toxic to aquatic life with long lasting effects
16.2 Further information:
SDS Creation Date:.........September 27, 2017
SDS Revision #: ..........-01-A
SDS Revision Date:.......January 5, 2018
Reason for Revision:.....Update product name

www.3dsystems.com
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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