

Safety data sheet  
according to 1907/2006/EC, Article 31

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SECTION 1: Identification of the substance/mixture and of the company/undertaking**1.1 Product identifier**

- **Trade name:** Ecogray
- **Synonym / Description:** Photocurable resin for LCD/DLP 3D printers for jewelry/ acrylic paint for UV cure for figurines

**1.2 Relevant identified uses of substance or mixture and uses advised against**

- **Application of the substance / the preparation**  
Resin for LCD/DLP 3D printers / UV curable paint for figurines

**1.3 Details of the supplier of the safety data sheet**

- **Manufacturer / Supplier:**  
BlueCast  
Corso Italia, 25 Verdello 24049 BG Italy  
+39 035 52 93 098  
+39 3483391300

**1.4 Emergency telephone number**

- +39 3483391300
- +39 035 52 93 098

SECTION 2: Hazards identification**2.1 Classification of the substance or mixture**

- **Classification according to regulation (EC) No 1272/2008**
  - GHS07  
Skin Sens. 1 H317 May cause an allergic skin reaction.
  - GHS08 health hazard  
Repr. 2 H361f Suspected of damaging fertility.
  - GHS09 environment  
Aquatic Chronic 2 H411 Toxic to aquatic life with long lasting effects.
- **Information concerning particular hazards for human ad environment:** Not applicable.
- **Classification system:** The classification is according to the latest editions of the EU-lists and extended by company and literature data.



GHS07



GHS08



GHS09

**2.2 Label elements**

- **Labelling according to Regulation (EC) No 1272/2008**  
The substance is classified and labelled according to the CLP regulation.

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▪ **Hazard pictograms**



GHS07 GHS08 GHS09

▪ **Signal word** Warning

▪ **Hazard – determining component of labelling**

Diphenyl(2,4,6-trimethylbenzoyl) phosphine oxide

▪ **Hazard statements**

- H317 May cause an allergic skin reaction.
- H361f Suspected of damaging fertility.
- H411 Toxic to aquatic life with long lasting effects.

▪ **Precautionary statements**

- P262 Do not get in eyes, on skin, or on clothing.
- P273 Avoid release to environment.
- P280 Wear protective gloves.
- P281 Use personal protective equipment as required.
- P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- P353 Rinse skin with water/shower.
- P308+P313: IF exposed or concerned: Get medical advice/attention.
- P302+P352: IF ON SKIN: Wash with plenty of soap and water.
- P405 Store locked up.
- P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

▪ **Additional information:** For the wording of the listed risk phrases refer to section 16.

▪ **Result of PBT and vPvB assessment:** Not applicable.

▪ **PBT:** Not applicable.

▪ **vPvB:** Not applicable.

SECTION 3: Composition/information on ingredients

**3.1 Chemical characterization:** Substances

Acrylate oligomers 10/70%	C.A.S. reserved (atoxic oligomers)
Acrylate monomers 10/70%	C.A.S. reserved (atoxic polyols)
Inorganic pigment 0.1/5%	C.A.S. reserved (atoxic pigment)
Photoinitiators 0,1/5%	C.A.S. 75980-60-8

SECTION 4: First aid measures

**4.1 Description of first aid measures**

▪ **General information:**

- Immediately remove any clothing soiled by the product.
- Involve doctor immediately.

▪ **After inhalation:**

- In case of accidental inhalation of monomers provide fresh air, rest and warmth.

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Supply fresh air and to be sure call for a doctor.

In case of unconsciousness place patient stably in side position for transportation.

▪ **After skin contact:**

Immediately wash with water and soap and rinse thoroughly.

Avoid contact with UV and sunlight.

▪ **After eye contact:**

Rinse opened eye for several minutes under running water. Then consult a doctor.

▪ **After swallowing:**

Call a doctor immediately.

Rinse out mouth and then drink plenty of water.

**4.2 Most important symptoms and effects, both acute and delayed**

No further relevant information available.

**4.3 Indication of any immediate medical attention and special treatment needed**

No further relevant information available.

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SECTION 5: Firefighting measures

**5.1 Extinguishing media**

- Fight larger fires with water spray or alcohol resistant foam.  
Use fire extinguishing methods suitable to surrounding conditions.
- **For safety reasons unsuitable extinguishing agents:** water with full jet.

**5.2 Special hazard arising from the substance or mixture**

In case of fire, the following can be released: CO<sub>2</sub>

**5.3 Advice for firefighters**

- **Protective equipment:**  
Wear self-contained respiratory protective device.  
Wear fully protective suit.
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SECTION 6: Accidental release measures

**6.1 Personal precautions, protective equipment and emergency procedures**

Ensure adequate ventilation

Keep people at a distance and stay on the windward side.

**6.2 Environmental precautions:**

Inform respective authorities in case of seepage into water course or sewage system.

Do not to allow to enter sewers / surface or ground water.

**6.3 Methods and material for containment and cleaning up:**

Dispose contaminated material as waste according to item 13.

**6.4 Reference to other sections**

See section 7 for information on safe handling.

See section 8 for information on personal protection equipment.

See section 13 for disposal information.

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## SECTION 7: Handling and storage

### **7.1 Precautions for safe handling**

- Ensure good ventilation/exhaustion at the workplace.
- Open and handle receptacle with care.
- Prevent formation of dust.

- **Information about fire – and explosion protection:**

- Keep ignition sources away – Do not smoke.
- Protect from heat.

### **7.2 Conditions for safe storage, including any incompatibilities**

- **Storage:**

- Requirements to be met by storerooms and receptacles: no special requirements.

- **Information about storage in one common storage facility:** not required.

- **Further information about storage conditions:**

- Store in cool, dry condition in well-sealed receptacles.
- Protect from heat and direct sunlight.
- Store receptacle in a well-ventilated area.
- Store under lock and key or with access restricted to technical experts or their assistants only.
- Do not expose to temperature above 60 Celsius.

### **7.3 Specific and use**

- No further relevant information available.
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## SECTION 8: Exposure controls/personal protection

- Additional information about design of technical facilities: no further data; see item 7.

### **8.1 Control parameters**

- Ingredients with limit values that require monitoring at the workplace: not required.
- Additional information: The lists valid during the making ere used as basis.

### **8.2 Exposure controls**

- **Personal protective equipment:**

- **General protective and hygienic measures:**

- The usual precautionary measures are to be adhered too when handling chemicals.
- Keep away from foodstuffs, beverages and feed.
- Wash hands before breaks and at the end of work.

- **Respiratory protection:**

- In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self- contained respiratory protective device.
- Respirator must be worn if exposed to dust.

- **Protection of hands:**

- Protective gloves

- **Material of gloves:**

- Products without solvents added: wear nitrile gloves. Replace gloves immediately when torn or any change in appearance (dimension, color, flexibility etc.) is noticed.



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▪ **Penetration time of glove material**

The exact break through time has to be found out by manufacturer of the protective gloves and has to be observed.

▪ **Eye protection:**

Tightly sealed goggles

Goggles recommended during refilling

▪ **Body protection:** impervious protective clothing.



SECTION 9: Physical and chemical properties

**9.1 Information on basic physical and chemical properties**

▪ **General information**

▪ **Appearance:**

Form: Liquid

Color: Grey

▪ **Odor:** Characteristic acrylic

▪ **Odor threshold:** Not determined

▪ **Change in condition**

Melting point / Melting range:

-8°C

Boiling point / Boiling range:

>90°C

▪ **Flash point:**

>170°C

▪ **Flammability (solid, gaseous):**

Product is not flammable.

▪ **Ignition temperature:**

>230°C

Decomposition temperature:

>250°C

▪ **Self-igniting:**

Product is not self-igniting.

▪ **Danger of explosion:**

Not explosive.

▪ **Explosion limits:**

Lower:

Not determined.

Upper:

Not determined.

▪ **Vapour pressure:**

Not applicable.

▪ **Density:**

Not determined.

▪ Bulk density at 20°C:

0.95 g/cm<sup>3</sup>

▪ Relative density:

Not determined.

▪ **Vapour density:**

Not applicable.

▪ **Evaporation rate:**

Not applicable.

▪ **Solubility in / Miscibility with water at 20°C:**

>100 g/L

▪ **Position coefficient (n-octanol/water):**

Not determined.

▪ **Viscosity:**

Dynamic (25°C):

3000-5400 mPas

Kinematic:

Not applicable.

**Solid contents:**

98%

**9.2 Other information:** No further relevant information available.

## SECTION 10: Stability and reactivity

### 10.1 Reactivity

### 10.2 Chemical stability

- **Thermal decomposition / conditions to be avoided:**

Do not expose to temperatures above 60 Celsius.

No decomposition if used and stored according to specifications.

### 10.3 Possibility of hazardous reactions

No dangerous reactions known.

### 10.4 Condition to avoid

No further relevant information available.

### 10.5 Incompatible materials

Incompatible with strong acids and strong bases.

Avoid moisture.

### 10.6 Hazardous decomposition products

No dangerous decomposition products known.

## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

- **Acute toxicity:**

Primary irritant effect:

Irritation of skin

OECD 404 Skin irritation, 0.04 (rabbit) (PII 0-8)

Irritation of eyes

OECD 405 Eye irritation, 2.2 (rabbit) (PII 0-13)

- **Skin corrosion/irritation:**

Based on available data, the classification criteria are not met.

- **Serious eye damage/irritation:**

Causes serious eye irritation.

- **Respiratory or skin sensitisation:**

Dermal OECD 406 sensitisation

- **CMR effects** (carcinogenity, mutagenicity and toxicity for reproduction): Based on available data, the classification criteria are not met

## SECTION 12: Ecological information

### 12.1 Toxicity

- **Aquatic toxicity:**

EC50/48h

3.53 mg/l (Daphnia)

EC50/72h

1.56 mg/l (Algae)

EC20(3h)

>1000 mg/l (Bacteria)

LC50/96h

1.2 mg/l (Fish)

### 12.2 Persistence and degradability

No further relevant information available.

### 12.3 Bioaccumulative potential

No further relevant information available.

### 12.4 Mobility in soil

No further relevant information available.

- **Ecotoxicological effects:**

- **Remark:** Harmful to fish.

- **Additional ecological information:**

General notes:

Water hazard class 2(German Regulation) (Self-assessment): hazardous for water

Do not allow product to reach ground water, water course or sewage system.

Danger to drinking water if even small quantities leak into the ground.

Harmful to aquatic organisms.

**12.5 Results of PBT and vPvB assessment**

- **PBT:** Not applicable.
- **VPvB:** Not applicable.

**12.6 Other adverse effects** No further relevant information available.

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SECTION 13: Disposal considerations

**13.1 Waste treatment methods**

- Recommendation Can be incinerated, when in compliance with local regulations.
  
- European waste catalogue  
08 01 99 wastes not otherwise specified

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- Uncleaned packaging:
- Recommendation:  
Disposal must be made according to official regulations.  
Packaging may be reused or recycled after cleaning.

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SECTION 14: Transport information

<b>14.1 UN-Number ADR, AND, IMDG, IATA</b>	Void
<b>14.2 UN pro per shipping name ADR AND, IMDG, IATA</b>	Void
<b>14.3 Transport hazard class(es) ADR, AND, IMDG, IAT Calss</b>	Void
<b>14.4 Packing group ADR, IMDG, IATA</b>	Void
<b>14.5 Environmental hazards:</b>	Marine pollutant: No
<b>14.6 Special precautions for user</b>	Not applicable.
<b>14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code</b>	Not applicable.
▪ UN "Model Regulation":	-

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SECTION 15: Regulatory information

**15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

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SECTION 16: Other information

The data are based on the current state of our knowledge and are intended to describe the product with regard to the requirements of safety. The data should not be taken to imply any guarantee of a particular or general specification. It is the responsibility of the user of the product to ensure to his satisfaction that the product is suitable for the intended purpose and method to use. We do not accept responsibility for any harm caused by the use of this information. Furthermore, nothing contained herein shall be construed as a recommendation to use any product in conflict with existing patents covering any material or its use. In all cases, our general condition of sale is applied.

▪ **Abbreviations and acronyms:**

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations concerning the international transport of Dangerous Goods by Rail)

ICAO: International Civil Aviation Organization

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the international Carriage of Dangerous Goods by Road)

IMDG: International Air Transport Association

GHS: Globally Harmonized System of Classification and labelling of chemicals

CAS: Chemical Abstracts Service (division of the American Chemical society)

\*Data compared to the previous version altered.