

**Safety Data Sheet**  
**CPS IC142**  
*Colorado Photopolymer Solutions, LLC*

Reviewed on 3/1/16

<b>1. Product and Company Information</b>
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Product Name           CPS Resin: Investment Casting Resin  
Product Number        CPS Resin: IC142

**Recommended use of the chemical and restrictions on use**

Identified uses           Photopolymer Resin.  
Uses and exposure        Photosensitive material for 3D printing  
Uses advised against      No information available

Company                 Colorado Photopolymer Solutions, LLC  
Address                   1880 S. Flatiron Ct., Suite J  
                                  Boulder, CO 80301

Telephone Number   303-520-4107

Emergency Number   303-520-4107

<b>2. Hazard(s) Identification</b>
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Emergency Overview

<b>Physical State</b>	Liquid		<b>Color</b>	Black
<b>Odor</b>	Characteristic		<b>Appearance</b>	Black

Hazard Summary:    Causes skin irritation (H315);  
                              Causes serious eye irritation (H319);  
                              Toxic to aquatic life with long lasting effects (H411).

GHS Symbol:



**Precautionary Statements - Prevention**

Do not handle until all safety precautions have been read and understood  
Avoid contact with eyes, skin and clothing  
Keep container closed when not in use.

Wear protective gloves/protective clothing/eye protection/face protection  
Wash face, hands and any exposed skin thoroughly after handling

#### Precautionary Statements - Response

IF exposed or concerned, get medical advice/attention

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

IF ON SKIN: Gently wash with plenty of soap and water, Take off contaminated clothing and wash before reuse.

IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.

Collect spillage.

#### Precautionary Statements - Storage

Store locked up

Keep out of reach of children

#### Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant.

Hazards not otherwise classified (HNOC)

None

#### Other Information

None

Unknown acute toxicity

0% of the mixture consists of ingredient(s) of unknown toxicity

### 3. Composition/information on Ingredients

Proprietary Formulation

### 4. First-aid Measures

General:	Remove contaminated clothing.
Eye contact:	Wash affected eyes for at least 15 minutes under running water with eyelids held open.
Skin contact:	Wash thoroughly with soap and water. If irritation develops, seek medical attention.
Ingestion:	Rinse mouth and then drink plenty of water. Do not induce vomiting. Seek medical attention if necessary.

Inhalation: If difficulties occur after inhalation, remove to fresh air and seek medical attention.

### 5. Fire-Fighting Measures

Flash Point: >110°C

Auto-ignition Temperature: Unknown

Flammability: Unknown

Fire Fighting Information: Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes. Emits toxic fumes under fire conditions.

Extinguishing Media: Dry chemical, sand, carbon dioxide, foam, water spray.

### 6. Accidental Release Measures

In case of spill: Prevent further spill or leak if possible to do so without risk. Ventilate the area. Avoid generation of vapors. Contain and collect spilled chemical with non-combustible absorbent material such as clean sand, earth, diatomaceous earth or non-acidic clay and place into suitable properly labeled containers for prompt disposal.

Personal precautions: Wear self-contained breathing apparatus, rubber boots, and heavy rubber gloves. Keep unprotected persons away from chemicals.

Environmental precautions: Keep out of drains and water courses. Contain contaminated water/firefighting water. Do not discharge into drains/surface waters/groundwater.

Methods for cleaning up: Absorb with an inert material and place in a chemical waste container, and hold for waste disposal. Ventilate area and wash spill site after material pickup is complete.

### 7. Handling and Storage

#### Precautions for safe handling

#### **Advice on safe handling**

Handle in accordance with good industrial hygiene and safety practice, Ensure adequate ventilation, Protect from light.

Conditions for safe storage, including any incompatibilities

**Technical measures/Storage conditions**

Keep container tightly closed in a dry and well-ventilated place, Protect from light.

**Incompatible products**

Amines, Strong oxidizing agents, Strong acids, Strong bases, Oxygen scavengers, Thiosulfates.

**8. Exposure Controls/ Personal Protection**

General Measures:	Keep away from foodstuff, beverages, and feed. Wash hands before breaks and at the end of work.
Engineering Controls:	Ensure adequate ventilation. Safety shower and eye bath should be nearby. Recommended use in a chemical fume hood.
Eye Protection:	Eye and face protection recommended. It is recommended to wear NIOSH or equivalent certified chemical goggles.
Hand Protection:	Chemical-resistant gloves recommended.
Skin and Body Protection:	Skin protection recommended.
Ventilation:	Provide natural or mechanical ventilation to minimize exposure. When dealing with TPO ( <b>refer to Section 3</b> ) avoid inhalation of dusts and it is recommended to wear NIOSH or equivalent particulate respirator.

**9. Physical and Chemical Properties**

Appearance:	Black
Physical State:	Liquid
Odor:	Mild
pH Value:	Not determined
Melting Point:	Not determined
Boiling Point:	Not determined
Flash Point:	Not applicable
Flammability:	Not applicable
Decomposition Temp.:	Not determined
Danger of explosion:	Product does not present an explosion hazard.

**10. Stability and Reactivity**

- Chemical Stability: Stable under recommended storage conditions.
- Hazardous Polymerization: Reacts rapidly upon exposure to ultraviolet light or in the presence of inhibitor depleting heat. Polymerization is hazardous and can degenerate into an uncontrolled reaction.
- Incompatible materials: Strong oxidizing agents, strong reducing agents, free radical generators, oxygen scavengers, and peroxides.
- Hazardous Decomposition Products:  
Acrid smoke-fumes, carbon monoxide, carbon dioxide, sulfur oxides, hydrocarbons, nitrogen oxides and perhaps other toxic vapors may be released during a fire involving this product.

**11. Toxicological Information**

- Route of Exposure: Through contact with skin or after permeation of clothing.  
Inhalation of vapors.
- Toxicity  
Oral: Practically nontoxic. (Rat) LD50 > 2,000 mg/kg.
- Inhalation: 4 h acute toxicity estimate > 40 mg/L.

**12. Ecological Information**

Toxic hazard to aquatic environment with long lasting effects. Avoid exposure to nature resources at all costs.

**13. Disposal Considerations**

Dissolve or mix with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber. Observe all federal, state, and local environmental regulations. Must not be disposed of together with household garbage.

**14. Transport Information**

- UN-Number  
DOT, TDG, ADN, IMDG, IATA: Non-regulated material
- UN-Proper Shipping name

DOT, TDG, AND, IMDG, IATA: Non-regulated material

Transport hazard class(es)

DOT, TDG, ADN, IMDG, IATA

Class: Non-regulated material

Packing group

DOT, ADN, IMDG, IATA: Non-regulated material

Environmental hazards: Not applicable

Special precautions for user: Not applicable

### 15. Regulatory Information

Federal Regulations: Follow Hazardous Chemical Storage Reporting Requirements  
EPCRA 311-312

### 16. Other Information

Revision Date: 3/1/16

Abbreviations: GHS-Globally Harmonized System of Classification and Labeling of Chemicals  
NIOSH-National Institute for Occupational Safety and Health  
HMIS-Hazardous Materials Identification System  
EPCRA-Emergency Planning and Community Right-to-Know Act

Disclaimer:

The information and recommendations contained herein are believed to be correct, but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Colorado Photopolymer Solutions assumes no responsibility and shall not be held liable for any damage resulting from handling or from contact with the above product.