

# Safety Data Sheet

according to OSHA HCS 29 CFR 1910.1200(g)



Trade name: **COELENTERAZINE**

Revision date: 6/01/2020

Product No: 303

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## 1. PRODUCT AND COMPANY IDENTIFICATION

### Product identifiers

Product name: **Coelenterazine**  
Product No.: 303  
Manufacturer: Prolume / NanoLight  
  
CAS-no.: 55779-48-1  
EC-no.:

Other means of identification: CTZ

### Relevant identified uses of the substance or mixture and uses advised against

Identified uses: substrate for luciferase, laboratory chemical, antioxidant

### Details of the supplier of the safety data sheet

Supplier: Prolume  
P.O. Box 2746  
Pinetop, AZ 85935  
USA  
  
phone: +1 928-367-1200  
email: info@prolume.com

### Emergency telephone number

Phone: +1 928-367-1200

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## 2. HAZARD IDENTIFICATION

### Classification of the substance or mixture

GHS classification in accordance with 29 CFR 1910 (OSHA HCS) and No 1272/2008 [CLP] (EC)

### GHS label elements including precautionary statements

Pictogram NONE  
Signal word NONE  
Hazard statement  
Precautionary statements: NONE  
NONE

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NFPA ratings (scale 0-4)

Health = 0

Fire = 0

Reactivity = 0

HMIS-ratings (scale 0-4)

Health = 0

Fire = 0

Reactivity = 0

**Hazards not otherwise classified (HNOC) or not covered by GHS**

none

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## 3. COMPOSITION/INFORMATION ON INGREDIENTS

### Substances

Synonyms: Coelenterazine, CTZ, 8-benzyl-6-(4-hydroxyphenyl)-2-[(4-hydroxyphenyl)methyl]-7H-imidazo [1,2-a]pyrazin-3-one

Formula:  $C_{26}H_{21}N_3O_3$

Molecular weight: 423.46 g/mol

CAS-No.: 55779-48-1

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## 4. FIRST AID MEASURES

### Description of first aid measures

#### General advice

Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

#### If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

#### In case of skin contact

Wash off with soap and plenty of water. Consult a physician.

#### In case of eye contact

Flush eyes with water as a precaution.

#### If swallowed

Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

### Most important symptoms and effects, both acute and delayed

None

### Indication of any immediate medical attention and special treatment needed

No further relevant data available

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## 5. FIREFIGHTING MEASURES

### Suitable extinguishing media

Water, dry chemical, carbon dioxide, Halon, or standard foam

### Special protective equipment for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

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## 6. ACCIDENTAL RELEASE MEASURES

### Personal precautions

Avoid breathing vapors, mist or gas. Remove all sources of ignition.

### Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

### Methods and materials for containment and cleaning up

Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal. Wipe surface with moist towel.

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## 7. HANDLING AND STORAGE

### Precautions for safe handling

Avoid inhalation of vapor or mist. Avoid direct contact with substance.

### Conditions for safe storage

Keep container tightly closed in a dry and well-ventilated place. Store desiccated at -20°C.

Product is light sensitive. Protect from light at all times.

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## 8. EXPOSURE CONTROLS – PERSONAL PROTECTION

### Components with workplace control parameter

Substance: Coelenterazine CAS# 55779-48-1 Cat# 303 CTZ

Control parameter: No information available

### Personal protective equipment

**Hand protection:** Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

**Respiratory protection:** Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

**Eye protection:** Safety glasses with side-shields conforming to EN166 Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

**Hygiene measures:** Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

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## 9. PHYSICAL AND CHEMICAL PROPERTIES

Chemical Name	Coelenterazine
Appearance	Yellow crystalline powder
Odor	No data available
Odor threshold	No data available
pH	No data available
Melting point / freezing point	178-180C
Boiling point	No data available
Flash point	Not very flammable
Evaporate rate	No data available
Flammability	No data available
Explosive limits	No data available
Vapor pressure	No data available
Vapor density	No data available
Relative density	No data available
Solubility	Slightly to insoluble
Partition coefficient: n-octanol/water	No data available
Auto-ignition temperature	No data available
Decomposition temperature	No data available
Viscosity	No data available
Explosive properties	No data available
Oxidizing properties	No data available

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## 10. STABILITY AND REACTIVITY

**Reactivity:** No data available

**Chemical stability:** Stable under recommended storage conditions.

**Possibility of hazardous reactions:** No data available.

**Conditions to avoid:** Keep away from moisture, air, and light.

**Materials to avoid:** Oxidizing agents

**Hazardous decomposition products:** Thermal decomposition may release acrid smoke and irritating fumes

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## 11. TOXICOLOGICAL INFORMATION

**Acute toxicity:**

Oral LD50	None
Inhalation LC50	None
Dermal LD50	None

Other information on acute toxicity no data available

**Skin corrosion/irritation:** no data available

**Serious eye damage/eye irritation:** May be irritating in dust form

**Respiratory or skin sensitization:** May be irritating to respiratory tract & mucus membranes

**Germ cell mutagenicity:** no data available

### Carcinogenicity

**IARC:** No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

**ACGIH:** No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

**NTP:** No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

**OSHA:** No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

**Reproductive toxicity:** no data available

**Specific target organ toxicity - single exposure** (Globally Harmonized System): no data available

**Specific target organ toxicity - repeated exposure** (Globally Harmonized System): no data available

**Aspiration hazard:** no data available

**Additional Information RTECS:** None

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## 12. ECOLOGICAL INFORMATION

**Toxicity:** no information available

**Persistence and degradability:** no information available

**Biodegradation:** no information available

**Mobility in soil:** no information available

**Results of PBT and vPvB assessment:** no information available as chemical safety assessment not required/not conducted

**Other adverse effects:** An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

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## 13. DISPOSAL CONSIDERATIONS

Do not dispose product directly into sewage. Consult local state or national regulation for proper disposal.

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## 14. TRANSPORT INFORMATION

IATA, IMDG, DOT(US) not dangerous good

UN number: none

UN proper shipping name: none

Transport hazard class: none

Packing group: none

Environmental hazards: none

Special precaution for user: none

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## 15. REGULATORY INFORMATION

US Federal Regulations US Toxic Substances Control Act(TSCA): Not listed

SARA 302: No chemicals were found.

SARA 313: No chemicals were found.

SARA 311/312 Hazards: No chemicals were found.

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## 16. OTHER INFORMATION

Classification according to Regulation (EC) Nr. 1272/2008

Prepared by: Regulatory Department - Prolume Inc.

Copyright 2017 Prolume Inc. License granted to make unlimited paper copies for documentation use only. The information provided above is believed to be correct to our best knowledge, 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.

Its use must be supervised by a technically qualified individual experienced in handling potentially hazardous chemicals. Prolume shall not be held liable for any damage resulting from handling or contact with the above product.

Department issuing SDS:

Prolume Inc.  
P.O. Box 2746  
Pinetop, AZ 85935

Date of preparation / revision: 06/01/2020

### Abbreviations and acronyms:

*DOT: US Department of Transportation*

*IATA: International Air Transport Association*

*IMDG: International Maritime Code for Dangerous Goods*

*ACGIH: American Conference of Governmental Industrial Hygienists*

*CAS: Chemical Abstracts Service (division of the American Chemical Society)*

*NFPA: National Fire Protection Association (USA)*

*HMIS: Hazardous Materials Identification System (USA)*

*LC50: Lethal concentration, 50 percent*

*LD50: Lethal dose, 50 percent*

*PBT: Persistent, Bioaccumulative and Toxic*

*vPvB: very Persistent and very Bioaccumulative*

*NIOSH: National Institute for Occupational Safety*

*OSHA: Occupational Safety & Health*