



8210 N. Austin Avenue, Morton Grove, IL 60053-3205, U.S.A.
 847-967-6000 800-323-8144
 (Monday - Friday: 7:30 a.m. - 4:00 p.m. CST)

Emergency Contact:
 INFOTRAC 800-535-5053 [U.S.A.]

Name: Coelenterazine, Native
 Code: 1-361010-100, 1-361201-200, 1-361204-200, 1-361208-200

..... **SAFETY DATA SHEET**

SECTION 1 IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY

- 1.1 Product Identifier
 - Name Coelenterazine, Native
 - Code 1-361010-100, 1-361201-200, 1-361204-200, 1-361208-200
- 1.2 Use of Substance/Mixture
 - Use Analytical—Used in Bioluminescence Imaging
- 1.3 Details of Manufacturer/Supplier
 - Company Regis Technologies, Inc.
 - 8210 N. Austin Avenue
 - Morton Grove, IL 60053
 - 847-967-6000; 800-323-8144 (toll free)
 - Email: cservice@registech.com
 - www.registech.com
- 1.4 Emergency Telephone
 - INFOTRAC 800-535-5053 [U.S.A.]

SECTION 2 HAZARDS IDENTIFICATION

- 2.1 Classification of the Substance or Mixture
 - OSHA Hazards No known OSHA hazards.
 - Target Organs None known.

Hazard Indication (67/548/EEC or 1999/45/EC)

Symbol(s)	Xi	
R-Phrase(s)	R36/37/38	Irritating to eyes, respiratory system and skin.
S-Phrase(s)	S24/25	Avoid contact with skin and eyes.
	S6	Keep under nitrogen.
	S7/47	Keep container tightly closed and at a temperature not exceeding -20°C.

GHS Classification

Skin Corrosion / Irritation	Category 2	H315
Serious Eye Damage / Irritation	Category 2B	H320
STOT-single exposure	Category 3	H335

GHS Label Elements
 Pictograms or hazard symbols



GHS07

Signal Word Warning

Hazard Statement
 H315-Causes skin irritation.
 H320-Causes eye irritation.
 H335-May cause respiratory irritation.

Precautionary Statements
 [Precaution] P231 - Handle under inert gas
 P261 - Avoid breathing dust/fume/gas/mist/vapors/spray

Some abbreviations used throughout this MSDS: NA=not applicable; NE=not established; U=unknown/unavailable; NL=not listed; N=no; Y=yes.



8210 N. Austin Avenue, Morton Grove, IL 60053-3205, U.S.A.
 847-967-6000 800-323-8144
 (Monday - Friday: 7:30 a.m. - 4:00 p.m. CST)

Emergency Contact:
 INFOTRAC 800-535-5053 [U.S.A.]

Name: Coelenterazine, Native
 Code: 1-361010-100, 1-361201-200, 1-361204-200, 1-361208-200

SAFETY DATA SHEET

[Response] P264 - Wash thoroughly after handling
 P271 - Use only outdoors or in a well-ventilated area
 P280 - Wear protective gloves/protective clothing/eye protection/face protection
 P302+P352-IF ON SKIN: Wash with plenty of soap and water.
 P304+P341 - IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.
 P305+P351+P338-IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 P332+P313 - If skin irritation occurs: Get medical advice/attention
 P337+P313 - If eye irritation persists: Get medical advice/attention
 [Storage] P404: Store in a closed container.
 P411+P235+P410: Store at temperatures not exceeding -20 °C/-4°F. Keep cool. Protect from light.
 [Disposal] P501: Dispose of contents/container in accordance with all applicable governmental and environmental regulations.

SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS

Name	Coelenterazine, Native	
Synonyms	6-(4-hydroxyphenyl)-2-[(4-hydroxyphenyl)methyl]-8-(phenylmethyl)-imidazo[1,2-a]pyrazin-3(7H)-one; 3,2-Dihydro-2-(p-hydroxybenzyl)-6-(p-hydroxyphenyl)-8-benzylimidazo[1,2-a]pyrazin-3-one; Coelenterazin; CLZN, Coelenterazine ntv; Luciferin (Oplophorus); Native coelenterazine; Watasenia prelucliferin	
CAS No.	55779-48-1	
EINECS No.	none	
Chem. Formula	C ₂₆ H ₂₁ N ₃ O ₃	
Mol. Weight	423.46	
Ingredients		Concentration (%/wt)
	Coelenterazine, Native (55779-48-1)	NLT 95.0 %
	Manufacturing impurities	NMT 5.0 %

SECTION 4 FIRST AID MEASURES

4.1 Description of first aid measures
 General: Do not attempt to neutralize as it frequently makes matters worse.
 Eye contact: Rinse eyes with plenty of water for at least 15 minutes; lift eyelids occasionally. If irritation persists, consult physician.
 Skin contact: Immediately remove contaminated clothing and shoes, then wash skin with soap and plenty of water. If irritation persists, consult physician.
 Inhalation: Remove to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration and keep person warm and at rest. Consult physician.
 Ingestion: Give large amounts of water or milk (two glasses at most). Avoid vomiting. Consult physician immediately.
 Physician note: Symptomatic and supportive care. There is no specific antidote.

4.2 Most important symptoms and effects, both acute and delayed.
 Eyes-may cause mild irritation on contact. May be irritating to skin. May be irritating to mucous membranes, if mists are inhaled. May be harmful if ingested.

4.3 Indication of immediate medical attention and special treatment needed.
 No information available.

SECTION 5 FIRE-FIGHTING MEASURES

5.1 Suitable Extinguishing Media
 Not applicable.

Some abbreviations used throughout this MSDS: NA=not applicable; NE=not established; U=unknown/unavailable; NL=not listed; N=no; Y=yes.



Name: Coelenterazine, Native
 Code: 1-361010-100, 1-361201-200, 1-361204-200, 1-361208-200

..... **SAFETY DATA SHEET**

SECTION 9 **PHYSICAL AND CHEMICAL PROPERTIES**

9.1 Information on physical and chemical data

Chemical Formula	C ₂₆ H ₂₁ N ₃ O ₃	
Molecular Weight	423.46	
Form	solid	
Appearance	Yellowish to orange-brown	
Odor	none	
Odor threshold	No data available.	
pH	No data available.	
Melting/freezing point	175-179°C (346-354 °F) (lit.)	
Boiling point:	No data available.	
Flammability (liquid)		
Flash Point	No data available.	
Flammable limits (%v/v)	UEL (upper explosive limit)	No data available.
	LEL (lower explosive limit)	No data available.
Autoignition temperature	No data available.	
Decomposition temperature	No data available.	
OSHA Flammability Class	No data available.	
Evaporation Rate (BuAc = 1.0)	No data available.	
Vapor pressure (mmHg)	No data available.	
Vapor density (air=1):	No data available.	
Relative density (g/cm ³)	1.32	
Water Solubility	Slightly soluble.	
Water reactive	No data available.	
Solubility (other)	No data available.	
Partition coefficient: N-octanol/water	Kow (Pow) = 4.98	(KOWWIN v1.68)
Viscosity	No data available.	
Solubility in organic solvents	methanol, ethanol, acetone (1%)	
Spectral Properties Abs/Em:	429/466 nm (solvent system ethanol)	

SECTION 10 **STABILITY AND REACTIVITY**

- 10.1 Reactivity
 - No dangerous reaction known under conditions of normal use.
- 10.2 Chemical Stability
 - Stable if stored dry, under nitrogen in light-tight containers, in the dark at or below -20°C.
- 10.3 Possibility of hazardous reactions
 - No hazardous reactions known under conditions of normal use.
- 10.4 Conditions to avoid
 - Avoid incompatibilities.
 - Keep out of water supplies and sewers.
- 10.5 Incompatible materials
 - Light (photosensitive), heat, air—Discolors or decomposes upon exposure to light, heat, and/or air.
 - Oxidizers
 - Coelenterazine spontaneously oxidizes in aerobic conditions or in some organic solvents such as dimethylformamide or DMSO.
- 10.6 Hazardous decomposition products
 - Combustion carbon oxides, nitrogen oxides

Some abbreviations used throughout this MSDS: NA=not applicable; NE=not established; U=unknown/unavailable; NL=not listed; N=no; Y=yes.



8210 N. Austin Avenue, Morton Grove, IL 60053-3205, U.S.A.
 847-967-6000 800-323-8144
 (Monday - Friday: 7:30 a.m. - 4:00 p.m. CST)

Emergency Contact:
 INFOTRAC 800-535-5053 [U.S.A.]

Name: Coelenterazine, Native
 Code: 1-361010-100, 1-361201-200, 1-361204-200, 1-361208-200

..... **SAFETY DATA SHEET**

SECTION 11 **TOXICOLOGICAL INFORMATION**

11.1 Toxicological Information		
Acute toxicity	Oral LD50	No data available.
	Inhalation LC50	No data available.
	Dermal LD50	No data available.
	Other acute toxicity	No data available.
Skin corrosion/irritation	Causes skin irritation.	
Serious eye damage/irritation	Causes eye irritation.	
Respiratory irritation	Not Classified - No data available.	
Respiratory or skin sensitization	No data available.	
Germ cell mutagenicity	No data available.	
Carcinogenicity		
IARC	No data available.	
NTP	No data available.	
OSHA	No data available.	
Reproductive toxicity (Including teratogenicity)	No data available.	
Specific target organ toxicity (STOT)		
STOT-single exposure	May cause respiratory irritation.	
STOT-repeated exposure	No data available.	
Aspiration hazard	No data available.	
RTECS Number	Not available	
11.2 Further Information		
Potential health effects		
Eye	Causes irritation.	
Skin	Causes irritation.	
Inhalation	May be irritating to mucous membranes and respiratory tract.	
Ingestion	No data available.	
Symptoms	See above route. Pre-existing conditions that may be aggravated: not determined.	
Miscellaneous	No data available.	

SECTION 12 **ECOLOGICAL INFORMATION**

12.1 Ecotoxicity	No data available.
12.2 Persistence and degradability	No data available.
12.3 Bioaccumulative potential	BCF = No data available.
	Log Kow = 4.98 (KOWWIN v1.68)
	(Not expected to be hazardous to the environment in standard handling quantities.)
12.4 Motility in soil	No data available.
12.5 Other adverse effects	No data available.

SECTION 13 **DISPOSAL CONSIDERATIONS**

13.1 Disposal methods	
U . S. EPA Waste Codes	None
Waste Characterization (per U. S. regulations)	RCRA Hazard Class (40CFR 261): none Generator is responsible for proper waste characterization. NOTE: U. S. state hazardous waste regulations may differ considerably from U. S. Federal regulations.
Waste Disposal	That which cannot be recovered or recycled, should be disposed of in accordance with all applicable international, national, regional, state, and local laws. Do NOT dump into any sewer, on ground, or into any body of water.

Some abbreviations used throughout this MSDS: NA=not applicable; NE=not established; U=unknown/unavailable; NL=not listed; N=no; Y=yes.



8210 N. Austin Avenue, Morton Grove, IL 60053-3205, U.S.A.
 847-967-6000 800-323-8144
 (Monday - Friday: 7:30 a.m. - 4:00 p.m. CST)

Emergency Contact:
 INFOTRAC 800-535-5053 [U.S.A.]

Name: Coelenterazine, Native
 Code: 1-361010-100, 1-361201-200, 1-361204-200, 1-361208-200

..... **SAFETY DATA SHEET**

SECTION 14 **TRANSPORT INFORMATION**

14.1 UN number Not applicable. Not regulated—Not a dangerous goods.
 14.2 UN proper shipping name Not applicable.
 14.3 Transport Hazard Class Not applicable.
 14.5 Packing group Not applicable.
 14.6 Environmental hazards Not applicable
 14.6 Special precautions for user See Section 8 for exposure/personal protection guidance.
 NA Emergency Guidebook Number: Not applicable.

SECTION 15 **REGULATORY INFORMATION**

15.1 Safety, health and Environmental regulations specific for the product in question.

OSHA Health: No known hazards. Physical: No known hazards.
 NFPA: H2 F0 R0 HMIS: H2 F0 PH0

15.2 Chemical Inventory Lists

.....Coelenterazine, Native
 CAS Number..... 55779-48-1
 TSCA: NL
 EINECS:..... NL
 Number..... NA
 OSHA Process Safety [29 CFR 1910.119]: NL
 TQ (lbs)..... NA
 CERCLA [Section 103 (40 CFR 302.4)]:..... NL
 RQ (lbs) NA
 RCRA Waste Code..... NA
 Clean Air Act
 [Section 112r (40 CFR 68)]:..... NL
 TQ (lbs)..... NA
 Contains Ozone Depleters (Class I or Class II) N
 [Section 103 (40 CFR 302.4)]: NL
 SARA Title III Notification [40 CFR 302.4]:
 Section 302/304 (EHS) Ingredient [40 CFR 355.3]..... NL
 TPQ (lbs)..... NA
 RQ (lbs) NA
 Section 313 Ingredient [40 CFR 372.65] NL
 SARA Hazards Acute..... N Chronic..... N Fire..... N Pressure..... N ReactivityN
 State Lists: NL
 States..... NL
 On CA 65 Significant Risk Level..... NL

SECTION 16 **OTHER INFORMATION**

16.1 Literature References

None.

The above information is believed to be correct to the best of our present state knowledge, but does not purport to be all-inclusive and shall be used only as a guide. It characterizes the product with regard to the appropriate safety precautions. It does not represent a guarantee of any properties of the product.

This is the last page of this MSDS.

Some abbreviations used throughout this MSDS: NA=not applicable; NE=not established; U=unknown/unavailable; NL=not listed; N=no; Y=yes.