
MATERIAL SAFETY DATA SHEET**Cypridina (Vargula) Luciferase Assay Kit****Composition/Information on Ingredient:**

Substance Name: d-Luciferin

CAS # 2591-17-5

SARA 313 None

Formula C₁₁H₈N₂O₃**Hazards Identification:**

HMIS RATING: HEALTH: 0 FLAMMABILITY: 0 REACTIVITY: 1

NFPA RATING: HEALTH: 0 FLAMMABILITY: 0 REACTIVITY: 1

First Aid Measures:

ORAL EXPOSURE: If swallowed, wash out mouth with water provided person is conscious. Call a physician.

INHALATION EXPOSURE: If inhaled, remove to fresh air. If breathing becomes difficult, call a physician.

DERMAL EXPOSURE: In case of contact, wash skin with soap and water.

EYE EXPOSURE: In case of contact with eyes, flush with copious amounts of water for at least 10 minutes. Assure adequate flushing by separating the eyelids with fingers. Call a physician.

Fire Fighting Measures:

FLASH POINT: N/A AUTOIGNITION TEMP: N/A FLAMMABILITY: N/A

SUITABLE EXTINGUISHING MEDIA: Water spray, Carbon dioxide, dry chemical powder, or appropriate foam.

FIREFIGHTING Protective Equipment: Wear self-contained breathing apparatus and protective clothing to prevent contact of volatile combustion products with lungs, skin, and eyes.

Specific Hazard(s): Emits toxic fumes under fire conditions.**Accidental Release Measures:**

PROCEDURE(S) OF PERSONAL PRECAUTION(S) Exercise appropriate precautions to minimize direct contact with skin or eyes and prevent inhalation of dust.

Methods for Clean-up: Sweep up, place in a bag and hold for waste disposal.**Handling and Storage & Stability:**

User Exposure: Avoid inhalation. Avoid contact with eyes, skin, and clothing. Avoid prolonged or repeated exposure.

STORAGE: Keep tightly closed. Store at -20°C or colder, keep away from Oxygen, hypochlorite, peroxides, and other oxidizing agents. Does not decompose in most reducing agents.

SPECIAL REQUIREMENTS: Keep away from bright light, UV light, and away from direct sunlight.

Exposure Controls / PPE:

ENGINEERING CONTROLS: Safety shower and eye bath. Mechanical exhaust required.

PERSONAL PROTECTIVE EQUIPMENT:

Respiratory: Wear dust mask. Hand: Protective gloves. Eye: Chemical safety goggles.

GENERAL HYGIENE MEASURES: Wash with soap and water after handling.

Physical/Chemical Properties:

Physical Appearance and State: Granular Orange-Brown Solid

Bibliography and Citation Index: <http://www.jbc.org/cgi/content/full/272/31/19359#abs>

Form: slightly yellowish white powder

Molecular Weight 280.3

pH N/A

BP/BP Range N/A

MP/MP Range N/A

Freezing Point N/A

Vapor Pressure N/A

Vapor Density N/A

Saturated Vapor Conc. N/A

Bulk Density N/A

Odor Threshold N/A

Volatile% N/A

VOC Content N/A

Water Content N/A

Solvent Content N/A

Evaporation Rate N/A

Viscosity N/A

Surface Tension N/A

Partition Coefficient Log Kow: Unknown

Decomposition Temp. N/A

Flash Point N/A

Explosion Limits N/A

Flammability N/A

Autoignition Temp N/A

Refractive Index N/A

Optical Rotation N/A

Solubility: Highly soluble in Methanol & Ethanol

Reactivity:

HAZARDOUS DECOMPOSITION PRODUCTS: Carbon monoxide, Carbon dioxide, Nitrogen oxides.

HAZARDOUS POLYMERIZATION: Will not occur

Toxicological Information

ROUTE OF EXPOSURE

Skin Contact: May cause skin irritation.

Skin Absorption: May be harmful if absorbed through the skin.

Eye Contact: May cause eye irritation.

Inhalation: May be harmful if inhaled. Material may be irritating to mucous membranes and upper respiratory tract.

Ingestion: May be harmful if swallowed.

SIGNS AND SYMPTOMS OF EXPOSURE: Unknown

Ecological Information:

Vargula-Cypridina Luciferin is a product found in nature and is obtained by natural product extraction from the collected Ostracod *Vargula hilgendorfi*.

Disposal Considerations:

Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber. Observe all federal, state, and local environmental regulations.

Transport Information:

This substance is considered to be non-hazardous for transport.

IATA Non-Hazardous for Air Transport: Non-hazardous for air transport.

Regulatory Information:

UNITED STATES REGULATORY INFORMATION

SARA LISTED: No

CANADA REGULATORY INFORMATION

WHMIS Classification: This product has been classified in accordance with the hazard criteria of the CPR, and the MSDS contains all the information required by the CPR.

DSL: No

NDSL: No

Other Information:

DISCLAIMER: Suitable for research and development, not suitable for drug, human, pharmaceutical or in human or veterinary diagnostics applications.

WARRANTY: The above information is 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. Targeting Systems shall not be held liable for any damage resulting from handling or from contact with the above product.