

Version : 1.1

Update : 2020-04-22

## SAFETY DATA SHEET

### Section 1-Identification of the substance/mixture and of the company/undertaking

#### 1.1 Identification of the substance or mixture

Product code : L00877-1000

Product name : Fire-Lumi Luciferase detection reagent

#### 1.2 Company/undertaking identification

GenScript Technologies

#### 1.3 24 hour Emergency Response:

Emergency Phone #: 1-732-885-9188

Telephone : 1-877-436-7274

Fax : 1-732-210-0262

E-mail address : [product@genscript.com](mailto:product@genscript.com)

Web : <http://www.genscript.com>

#### 1.4 For Research Use Only. Not for use in diagnostic procedures.

### Section 2-Hazards identification

#### 2.1 Classification of the substance or mixture

##### Classification according to Regulation (EC) No 1272/2008

Acute toxicity, Oral (Category 4), H302

Skin irritation (category 2), H315

Eye irritation (category 2), H319

Long-term (chronic) aquatic hazard (Category 3), H412

#### 2.2 GHS Label elements, including precautionary statements



##### Pictogram

##### Signal word

warning

##### Hazard statement(s)

H302

Harmful if swallowed

H315

Causes skin irritation

H319

Causes serious eye irritation

H412

Harmful to aquatic life with long lasting effects.

##### Precautionary statement(s)

##### Prevention

P264

Wash skin thoroughly after handling.

P270	Do not eat, drink or smoke when using this product.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
<b>Response</b>	
P301 + P312	IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
P303+P361+P353	IF ON SKIN (or hair): Remove/Take off Immediately all contaminated clothing. Rinse SKIN with water/shower.
P273	Avoid release to the environment
P337+P313	IF eye irritation persists: Get medical advice/attention.

**Storage**

P410+P403	Protect from sunlight. Store in a well-ventilated place..
P405	Store locked up.

**Disposal**

P501	Dispose of contents/ container to an approved waste disposal plant.
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**2.3 Other hazards**

None.

**SECTION 3: Composition/information on ingredients**

**Chemical characterization: Mixtures**

**Description:**

The buffer of Fire-Lumi™ Firefly luciferase detection reagent is a mixture of the hazardous substances listed below along with unlisted nonhazardous substances. The substrate is a mixture of nonhazardous substances. The exact concentration percentages of the hazardous substances may be withheld as a Genscript secret.

Dangerous Components		
125572-95-4	<i>trans</i> -1,2-Diaminocyclohexane- <i>N,N,N',N'</i> -tetraacetic acid monohydrate	<1.00%
3483-12-3	DTT	<1.00%

**SECTION 4: First aid measures**

**4.1 Description of first aid measures**

**General advice**

Consult a physician. Show this safety data sheet to the doctor in attendance.

**In case of eye contact**

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

**In case of skin contact**

Wash off immediately with plenty of water for at least 15 minutes. Take off all contaminated

clothing and wash it before reuse. Immediate medical attention is required.

**If inhaled**

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

**If swallowed**

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**

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11.

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

No data available

**SECTION 5: Firefighting measures**

**5.1 Extinguishing media**

**Suitable extinguishing media**

Use water spray, dry chemical, foam, and carbon dioxide fire extinguisher.

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

No data available.

**5.3 Advice for firefighters**

Wear self-contained breathing apparatus and protective clothing.

**SECTION 6: Accidental release measures**

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

Use full personal protective equipment. Avoid breathing vapors, mist, dust or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Refer to protective measures listed in sections 8.

**6.2 Environmental precautions**

Try to prevent further leakage or spillage. Keep the product away from drains or water courses.

**6.3 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.

**SECTION 7: Handling and storage**

**7.1 Precautions for safe handling**

Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed. For precautions see section 2.2.

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

Keep container tightly sealed in cool, well-ventilated area. Keep away from direct sunlight and sources of ignition. Recommended storage temperature: Store at -20C° .

### 7.3 Specific end use(s)

No data available

## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

#### Components with workplace control parameters

This product contains no substances with occupational exposure limit values.

### 8.2 Exposure controls

#### Engineering controls

Ensure adequate ventilation. Provide accessible safety shower and eye wash station.

#### Personal protective equipment

Eye protection	Safety goggles with side-shields.
Hand protection	Protective gloves.
Skin and body protection	Impervious clothing.
Respiratory protection	Suitable respirator.
Environmental exposure controls	Keep the product away from drains, water courses or the soil. Clean spillages in a safe way as soon as possible.

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

#### Properties of Fire-Lumi™ Luciferase detection reagent

Appearance	No data available
Odor	No data available
Odor threshold	No data available
pH	No data available
Melting/freezing point	No data available
Boiling point/range	No data available
Flash point	No data available
Evaporation rate	No data available
Flammability (solid, gas)	No data available
Upper/lower flammability or explosive limits	No data available
Vapor pressure	No data available
Vapor density	No data available
Relative density	No data available
solubility	No data available
Partition coefficient	No data available
Auto-ignition temperature	No data available
Decomposition temperature	No data available

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Viscosity	No data available
Explosive properties	No data available
Oxidizing properties	No data available

## 9.2 Other safety information

No data available.

## SECTION 10: Stability and reactivity

### 10.1 Reactivity

No data available.

### 10.2 Chemical stability

Stable under recommended storage conditions.

### 10.3 Possibility of hazardous reactions

No data available.

### 10.4 Conditions to avoid

No data available.

### 10.5 Incompatible materials

No data available.

### 10.6 Hazardous decomposition products

No data available.

Other decomposition products - no data available.

## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

#### Acute toxicity

No data available

#### Skin corrosion/irritation

No data available

#### Serious eye damage/irritation

No data available

#### Respiratory or skin sensitization

No data available

#### Germ cell mutagenicity

No data available

#### Carcinogenicity

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

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

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

OSHA: No component of this product present at a level equal to or greater than 0.1%

is identified as a potential or confirmed carcinogen by OSHA.

**Reproductive toxicity**

No data available

**Specific target organ toxicity - single exposure**

No data available

**Aspiration hazard**

No data available

**Additional information**

RTECS. : Not available

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

**SECTION 12: Ecological information**

**12.1 Toxicity**

No data available.

**12.2 Persistence and degradability**

No data available.

**12.3 Bioaccumulative potential**

No data available.

**12.4 Mobility in soil**

No data available.

**12.5 Results of PBT and vPvB assessment**

PBT/vPvB assessment unavailable as chemical safety assessment not required or not conducted.

**12.6 Other adverse effects**

No data available.

**SECTION 13: Disposal considerations**

**13.1 Waste treatment methods**

**Product**

Offer surplus and non-recyclable solutions to a licensed disposal company.

**Contaminated packaging**

Dispose of as unused product.

**SECTION 14: Transport information**

**14.1 UN number**

ADR/RID: -           IMDG: -           IATA: -

**14.2 UN proper shipping name**

ADR/RID: -           IMDG: -           IATA: -

**14.3 Transport hazard class(es)**

ADR/RID: -           IMDG: -           IATA: -

**14.4 Packaging group**

ADR/RID: -      IMDG: -      IATA: -

**14.5 Environmental hazards**

ADR/RID: -      IMDG: -      IATA: -

**14.6 Special precautions for user**

No data available.

**SECTION 15: Regulatory information****SARA 302 Components:**

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

**SARA 313 Components:**

This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

**European Inventory of Existing Commercial Chemical Substances (EINECS):**

No data available.

**China Catalog of Hazardous chemicals 2015 :**

No data available.

**China Chemical Inventory of Existing Chemical Substances (China IECSC): No data available.**

**SECTION 16: Other information**

The above information is believed to be correct based on our present knowledge but does not purport to be complete. The product is for research use only and for trained personnel. The burden of safe use of this material rests entirely with the user. Beyotime disclaims all liability for any damage resulting from use of this material