

# Safety Data Sheet

*Release* 1.1  
*Revision* 12/12/2018  
*Date of issue* 12/17/2018

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## 1 Identification of the substance

### Identification of the substance

*Identification of the substance* econoLuciferase, buffered aqueous solution

*Additional identification* modified recombinant firefly Luciferase, GFP-labeled

*Biosynth catalog no.* L-8090

**REACH No.** A registration number is not available for this substance as the substance or its uses are exempted from registration, the annual tonnage does not require a registration or the registration is envisaged for a later registration deadline.

### Use of the substance/preparation

*Identified uses* enzyme substrate or reagent

*Restriction on use* not for food or drug use, for laboratory use only

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### Emergency Number

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## 2 Hazards identification

### Possible Hazards (Summary)

#### *Skin*

Skin corrosion/irritation (Category 2)

#### *Eyes*

Serious eye damage/eye irritation (Category 2)

#### *Ingestion*

acute toxicity (Category 4)

#### *Target Organs*

(single exposure), STOT SE3

Specific target organ toxicity, repeated exposure (STOT RE 2)

### GHS Labeling

#### *Regulatory List*

EC1272/08 Regulation (EC) 1272/2008 (GHS/CLP)

#### *Symbol*

GHS07 exclamation mark

#### *Pictogram*



GHS08 health hazard

*Pictogram**Signal Word*

Warning                      Warning

*Hazard Statement*

H302                      Harmful if swallowed.  
H315                      Causes skin irritation.  
H319                      Causes serious eye irritation.  
H335                      May cause respiratory irritation.  
H373                      May cause damage to organs through prolonged or repeated exposure.

*Precautionary Statement*

P260                      Do not breathe dust/fume/gas/mist/vapours/spray.  
P280                      Wear protective gloves/protective clothing/eye protection/face protection.  
P301+P312              IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.  
P302+P352              IF ON SKIN: Wash with plenty of soap and water.  
P304+P340              IF INHALED: Remove casualty 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.  
P312                      Call a POISON CENTER or doctor/physician if you feel unwell.

*Additional Information*

Caution! To the best of our knowledge the toxicological properties of this material have not been thoroughly investigated.

### 3 Composition/information on ingredients

**Substance related information**

*Substance name*                      econoLuciferase, buffered aqueous solution  
*Synonymes*                              modified recombinant firefly Luciferase, GFP-labeled  
*Cas No.*                                      [61970-00-1]  
*Formula*

### 4 First aid measures

**First Aid: Eye**

Immediately flush eyes with plenty of flowing water for 10 to 15 minutes holding eyelids apart. Consult an ophthalmologist.

**First Aid: Skin**

Wash immediately with plenty of water and soap for at least 15 minutes. Remove contaminated clothing and shoes. Wash contaminated clothes before reuse. Call a physician.

**First Aid: Ingestion**

Wash out mouth with water provided person is conscious. Call a physician.

**First Aid: Inhalation**

Remove casualty to fresh air and keep warm and at rest. If breathing is irregular or stopped, administer artificial respiration. Call a physician.

**Hints for Physician: Treatment**

Treat symptomatically.

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## 5 Firefighting measures

### Extinguishing Media

#### Suitable

foam, dry extinguishing powder, carbon dioxide (CO<sub>2</sub>), water spray jet

### Hazards During Fire-Fighting

toxic fumes

### Protective Equipment for Fire-Fighting

Wear a self-contained breathing apparatus and chemical protective clothing.

### Fire-Fighting/Further Advice

Do not inhale explosion and combustion gases. Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Move undamaged containers from immediate hazard area if it can be done safely.

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## 6 Accidental release measures

### Personal Precautions

Wear breathing apparatus if exposed to vapours/dusts/aerosols. Provide adequate ventilation.

### Environmental Precautions

Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains. Ensure all waste water is collected and treated via a waste water treatment plant.

### Methods for Cleaning or Taking Up

not available

### Further Accidental Release Measures

Collect in closed and suitable containers for disposal. Clear contaminated areas thoroughly. Ventilate affected area.

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## 7 Handling and storage

### Handling

#### Handling advice

Avoid contact with skin, eyes and clothing. Avoid ingestion and inhalation. Avoid prolonged or repeated exposure. Remove contaminated clothing and wash before reuse. Wash thoroughly after handling.

### Storage

#### Storage temperature

store at -15°C

#### Storage Requirements

Keep container tightly closed in an upright position to prevent leakage. Warm to Room Temperature before use. Keep away from incompatible substances.

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## 8 Exposure controles/personal protection

### Exposure controles

#### Industrial Hygiene

Mechanical exhaust required. Safety shower and eye shower.

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**Personal Protective Equipment****Respiratory Protection**

Wear NIOSH/MSHA or European Standard EN 149 approved respirator.

**Hand Protection**

Wear compatible chemical-resistant gloves to prevent skin exposure.

**Eye Protection**

Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA.

**Body Protection**

Wear compatible chemical-resistant gloves and clothing to prevent skin exposure.

**Advice on Safe Handling**

Wash contaminated clothing before reuse. Wear appropriate protective clothing to prevent exposure.

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**9 Physical and chemical properties****Form**

clear liquid

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**10 Stability and reactivity****Conditions to Avoid**

incompatible materials

**Substances to Avoid**

strong acids, strong bases, strong oxidizers

**Decomposition Products**

nitrogen oxides (NO<sub>x</sub>), carbon dioxide (CO<sub>2</sub>), sulphur oxides, carbon monoxide

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**11 Toxicological information****Other Relevant Toxicity Information**

We are not aware of any toxicology data.

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**12 Ecological Information****Biodegradation**

no data available

**Bioaccumulation**

no data available

**Distribution in Environment**

no data available

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**13 Disposal considerations****Advice on Disposal and Packaging***Advice on Disposal*

Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and, Dispose of waste according to laws applicable.

*Advice on Packaging*

not available

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**14 Transport information**

**Road Transport (ADR/GGVs)***Not restricted***Air Transport (IATA)***Not restricted***15 Other regulations****Other Regulations***Regulatory List*

IECSC, EINECS, TCSI

**16 Additional information****GHS Labeling***Regulatory List*

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