

# Safety Data Sheet

Release 1.0  
Revision 02/10/2015  
Date of issue 12/23/2016

## 1 Identification of the substance

### Identification of the substance

Identification of the substance DL-Luciferin 1-(4,5-dimethoxy-2-nitrophenyl)ethyl ester

Additional identification DMNPE-caged Luciferin

Biosynth catalog no. L-8305

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

### GHS Labeling

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

### Precautionary Statement

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.

P262 Do not get in eyes, on skin, or on clothing.

### 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 DL-Luciferin 1-(4,5-dimethoxy-2-nitrophenyl)ethyl ester

Synonymes DMNPE-caged Luciferin

Cas No. [154140-55-3]

Formula  $C_{21}H_{19}N_3O_7S_2$

## 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 condition**  
protect from light

**Storage Requirements**

Warm to Room Temperature before use. Keep away from incompatible substances. Keep container tightly closed when not in use.

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**8 Exposure controles/personal protection**

**Exposure controles**

**Industrial Hygiene**

Mechanical exhaust required. Safety shower and eye shower.

**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**

powder

**Phase Transition Solid/Liquid**

218 °C, 218 °C

**Molar Mass**

489,53 g/mol, 489,53 g/mol

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**10 Stability and reactivity**

**Conditions to Avoid**

incompatible materials, light

**Substances to Avoid**

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 regulated*

### Air Transport (IATA)

*not regulated*

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## 15 Other regulations

### Other Regulations

not available

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## 16 Additional information

### GHS Labeling

*Regulatory List*

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

*Precautionary Statement*

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