

# SAFETY DATA SHEET

## 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product identifiers

Product name: LUMINOL
CAS-No.: 521-31-3
Product Number: A68925

1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses: Laboratory chemicals, Manufacture of substances

1.3 Details of the supplier of the safety data sheet

Company: Philip Harris Ltd., 2 Gregory Street, Hyde, Cheshire, SK14 4HR,

**UNITED KINGDOM** 

Telephone: +44 (0)845 1200 506 Fax: +44 (0)161 367 2140

Email: enquiries@philipharris.co.uk

1.4 Emergency telephone number

Emergency Phone #: +44 (0)845 1200 506

## 2. HAZARDS IDENTIFICATION

## 2.1 Classification of the substance or mixture

According to Regulation (EC) No1272/2008; Skin irritation (Category 2), Eye irritation (Category 2), Specific target organ toxicity - single exposure (Category 3)

According to European Directive 67/548/EEC as amended: Irritating to eyes, respiratory system and skin.

#### 2.2 Label elements



Pictogram

Signal word Warning

**Hazard statement(s):** H315 Causes skin irritation. H319 Causes serious eye irritation. H335 May cause respiratory irritation.

**Precautionary statement(s):** P261 Avoid breathing dust/fume/gas/mist/vapours/spray. P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.



# Hazard symbol(s):

R-phrase(s): R36/37/38 Irritating to eyes, respiratory system and skin.

S-phrase(s): S26 In case of contact with eyes, rinse immediately with plenty of water and seek

medical advice. S36/37 Wear suitable protective clothing and gloves.

2.3 Other hazards - no data available.

#### 3. COMPOSITION/INFORMATION ON INGREDIENTS

#### 3.1 Substances

5-Amino-1,2,3,4-tetrahydrophthalazine-1,4-dione (Synonyms: 3-Aminophthalhydrazide, 5-Amino-

2,3-dihydro-1,4-phthalazinedione)

Formula:  $C_8H_7N_3O_2$  Molecular Weight: 177.16 CAS-No.: 521-31-3 EC-No.: 208-309-4

## 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.

If inhaled: If breathed in, move person into fresh air. If not breathing, give artificial respiration.

In case of skin contact: Wash off with soap and plenty of water.

In case of eye contact: Rinse thoroughly with plenty of water for at least 15 minutes.

If swallowed: Never give anything by mouth to an unconscious person. Rinse mouth with water.

- 4.2 Most important symptoms and effects, both acute and delayed: no data available
- 4.3 Indication of immediate medical attention and special treatment needed: no data available

## 5. FIRE-FIGHTING MEASURES

## 5.1 Extinguishing media

**Suitable extinguishing media:** Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

- 5.2 Special hazards arising from the substance or mixture: no data available
- **5.3** *Precautions for fire-fighters:* Wear self contained breathing apparatus for fire fighting if necessary.
- **5.4** Further information: no data available

## **6. ACCIDENTAL RELEASE MEASURES**

- **6.1** Personal precautions, protective equipment and emergency procedures: Use personal protective equipment. Avoid dust formation. Avoid breathing dust. Ensure adequate ventilation.
- **6.2** Environmental precautions: Do not let product enter drains.

- **6.3** *Methods and materials for containment and cleaning up:* Pick up and arrange disposal without creating dust. Keep in suitable, closed containers for disposal.
- **6.4 Reference to other sections:** For disposal see section 13.

#### 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. Normal measures for preventive fire protection.
- **7.2** Conditions for safe storage, including any incompatibilities: Store in cool place. Keep container tightly closed in a dry and well-ventilated place.
- 7.3 Specific end uses: no data available.

#### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters: Contains no substances with occupational exposure limit values.

## 8.2 Exposure controls

**Appropriate engineering controls:** Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

### Personal protective equipment

**Eye/face protection:** Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

**Skin protection:** The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

**Body Protection:** Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place., The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

**Respiratory protection:** Respiratory protection is not required. Where protection from nuisance levels of dusts are desired, use type N95 (US) or type P1 (EN 143) dust masks. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

#### 9. PHYSICAL AND CHEMICAL PROPERTIES

## 9.1 Information on basic physical and chemical properties

a) Appearance: Form: Powder Colour: Yellow

b) Odour: no data availablec) Odour Threshold: no data availabled) pH: no data available

e) Melting/freezing point: > 300 °C Melting point/range: no data available

f) Initial boiling point and boiling range: no data available

g) Flash point: no data available

h) Evaporation rate: no data availablei) Flammability (solid, gas): no data available

j) Upper/lower flammability or explosive limits: no data available

k) Vapour pressure: no data available
l) Vapour density: no data available
m) Relative density: no data available
n) Water solubility: no data available

o) Partition coefficient: n-octanol/water: no data available

p) Autoignition temperature: no data available
q) Decomposition temperature: no data available
r) Viscosity: no data available
s) Explosive properties: no data available
t) Oxidizing properties: no data available
9.2 Other safety information: no data available

## 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:* Strong oxidizing agents, Strong acids, Strong bases, Strong reducing agents

**10.6** *Hazardous decomposition products:* Hazardous decomposition products formed under fire conditions. - Carbon oxides, nitrogen oxides (NOx)

## 11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity: no data available

Skin corrosion/irritation: no data available

Serious eye damage/eye 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 levels greater than or equal to 0.1%

is identified as probable, possible or confirmed human carcinogen by IARC.

Reproductive toxicity: no data available

Specific target organ toxicity - single exposure: Inhalation - May cause respiratory irritation.

Specific target organ toxicity - repeated exposure: no data available

Aspiration hazard: no data available

Potential health effects

**Inhalation** May be harmful if inhaled. Causes respiratory tract irritation.

**Ingestion** May be harmful if swallowed.

**Skin** May be harmful if absorbed through skin. Causes skin irritation.

**Eyes** Causes eye irritation.

Signs and Symptoms of Exposure: no data available

Additional Information: RTECS: TH8890060

#### 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: no data available

12.6 Other adverse effects: no data available

## 13. DISPOSAL CONSIDERATIONS

## 13.1 Waste treatment methods

**Product:** Observe all federal, state, and local environmental regulations. 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.

Contaminated packaging: Dispose of as unused product.

14. TRANSPORT INFORMATION

14.1 UN-Number

ADR/RID: - IMDG: - IATA: -

14.2 UN proper shipping name

ADR/RID: Not dangerous goods IMDG: Not dangerous goods IATA: Not dangerous goods

14.3 Transport hazard class(es)

ADR/RID: - IMDG: - IATA: -

14.4 Packaging group

ADR/RID: - IMDG: - IATA: -

14.5 Environmental hazards

ADR/RID: no IMDG Marine pollutant: no IATA: no

14.6 Special precautions for users

no data available

## 15. REGULATORY INFORMATION

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

**15.1** Safety, health and environmental regulations/legislation specific for the substance or **mixture**: no data available

15.2 Chemical Safety Assessment: no data available

## 16. OTHER INFORMATION

Eye Irrit. Eye irritation

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H335 May cause respiratory irritation.

Skin Irrit. Skin irritation

STOT SE Specific target organ toxicity - single exposure

Xi Irritant

R36/37/38 Irritating to eyes, respiratory system and skin.