

## SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

Version 5.0 Revision Date 17.10.2011

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GENERIC EU MSDS - NO COUNTRY SPECIFIC DATA - NO OEL DATA

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

#### 1.1 Product identifiers

Product name : Phenytoin

Product Number : PHR1139

Brand : Fluka

CAS-No. : 57-41-0

#### 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 : Sigma-Aldrich Pte Ltd  
1 Science Park Road  
#02-14 The Capricorn  
Singapore Science Park Road II  
SINGAPORE 117528  
SINGAPORE

Telephone : +65 6779 1200

Fax : +65 6779 1822

#### 1.4 Emergency telephone number

Emergency Phone # : 1-800-262-8200

### 2. HAZARDS IDENTIFICATION

#### 2.1 Classification of the substance or mixture

##### Classification according to Regulation (EC) No 1272/2008 [EU-GHS/CLP]

Acute toxicity, Oral (Category 4)

Carcinogenicity (Category 1B)

Reproductive toxicity (Category 1B)

##### Classification according to EU Directives 67/548/EEC or 1999/45/EC

May cause cancer. May cause harm to the unborn child. Harmful if swallowed.

#### 2.2 Label elements

##### Labelling according Regulation (EC) No 1272/2008 [CLP]

Pictogram



Signal word : Danger

Hazard statement(s)

H302 : Harmful if swallowed.

H350 : May cause cancer.

H360 : May damage fertility or the unborn child.

Precautionary statement(s)

P201 : Obtain special instructions before use.

P308 + P313 : IF exposed or concerned: Get medical advice/ attention.

Supplemental Hazard : none

Statements

Restricted to professional users.

**According to European Directive 67/548/EEC as amended.**

Hazard symbol(s)



R-phrase(s)

R45

May cause cancer.

R61

May cause harm to the unborn child.

R22

Also harmful if swallowed.

S-phrase(s)

S53

Avoid exposure - obtain special instructions before use.

S45

In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

Restricted to professional users.

### 2.3 Other hazards - none

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## 3. COMPOSITION/INFORMATION ON INGREDIENTS

### 3.1 Substances

Formula :  $C_{15}H_{12}N_2O_2$

Molecular Weight : 252,27 g/mol

Component	Concentration
<b>Phenytoin</b>	
CAS-No. 57-41-0	-
EC-No. 200-328-6	-

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## 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. Consult a physician.

#### In case of skin contact

Wash off with soap and plenty of water. Consult a physician.

#### In case of eye contact

Flush eyes with water as a precaution.

#### If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

### 4.2 Most important symptoms and effects, both acute and delayed

Gastrointestinal disturbance, Nausea, Dizziness, Headache, Ataxia., slurred speech, Blurred vision, nystagmus, Confusion., Hallucinations., insomnia

### 4.3 Indication of any immediate medical attention and special treatment needed

no data available

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## 5. FIREFIGHTING 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**  
Carbon oxides, nitrogen oxides (NOx)
- 5.3 Advice for firefighters**  
Wear self contained breathing apparatus for fire fighting if necessary.
- 5.4 Further information**  
no data available

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## **6. ACCIDENTAL RELEASE MEASURES**

- 6.1 Personal precautions, protective equipment and emergency procedures**  
Use personal protective equipment. Avoid dust formation. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.
- 6.2 Environmental precautions**  
Prevent further leakage or spillage if safe to do so. Do not let product enter drains.
- 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.
- 6.4 Reference to other sections**  
For disposal see section 13.

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## **7. HANDLING AND STORAGE**

- 7.1 Precautions for safe handling**  
Avoid exposure - obtain special instructions before use. Avoid contact with skin and eyes. Avoid formation of dust and aerosols.  
Provide appropriate exhaust ventilation at places where dust is formed.
- 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

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## **8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

### **8.1 Control parameters**

**Components with workplace control parameters**

### **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**

Safety glasses with side-shields conforming to EN166 Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

##### **Skin protection**

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

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**

Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

### Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

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## 9. PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 Information on basic physical and chemical properties

a) Appearance	Form: crystalline Colour: white
b) Odour	no data available
c) Odour Threshold	no data available
d) pH	no data available
e) Melting point/freezing point	Melting point/range: 293 °C
f) Initial boiling point and boiling range	no data available
g) Flash point	no data available
h) Evaporation rate	no data available
i) 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

Bulk density	350 - 500 kg/m <sup>3</sup>
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## 10. STABILITY AND REACTIVITY

### 10.1 Reactivity

no data available

### 10.2 Chemical stability

no data available

### 10.3 Possibility of hazardous reactions

no data available

- 10.4 Conditions to avoid**  
no data available
- 10.5 Incompatible materials**  
Strong oxidizing agents Water
- 10.6 Hazardous decomposition products**  
Other decomposition products - no data available

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## 11. TOXICOLOGICAL INFORMATION

### 11.1 Information on toxicological effects

**Acute toxicity**

LDLO Oral - Child - 100 mg/kg

**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**

Possible human carcinogen

IARC: 2B - Group 2B: Possibly carcinogenic to humans (Phenytoin)

**Reproductive toxicity**

Presumed human reproductive toxicant

**Specific target organ toxicity - single exposure**

no data available

**Specific target organ toxicity - repeated exposure**

no data available

**Aspiration hazard**

no data available

**Potential health effects**

<b>Inhalation</b>	May be harmful if inhaled. May cause respiratory tract irritation.
<b>Ingestion</b>	Harmful if swallowed.
<b>Skin</b>	May be harmful if absorbed through skin. May cause skin irritation.
<b>Eyes</b>	May cause eye irritation.

**Signs and Symptoms of Exposure**

Gastrointestinal disturbance, Nausea, Dizziness, Headache, Ataxia., slurred speech, Blurred vision, nystagmus, Confusion., Hallucinations., insomnia

**Additional Information**

RTECS: Not available

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## 12. ECOLOGICAL INFORMATION

### 12.1 Toxicity

Toxicity to daphnia and other aquatic invertebrates. EC50 - Daphnia magna (Water flea) - 3,73 mg/l - 24 h

### 12.2 Persistence and degradability

no data available

