

**SAFETY DATA SHEET**

according to Regulation (EC) No. 1907/2006

Version 4.0 Revision Date 13.03.2010

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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**

Product name : (-)-Norepinephrine

Product Number : A7257

Brand : Sigma

Company : Sigma-Aldrich (Shanghai) Trading Co., Ltd  
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**2. HAZARDS IDENTIFICATION****Classification of the substance or mixture**

According to Regulation (EC) No1272/2008

Acute toxicity, Inhalation (Category 1)

Acute toxicity, Dermal (Category 2)

Acute toxicity, Oral (Category 2)

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

Very toxic by inhalation, in contact with skin and if swallowed.

**Label elements**

Pictogram



Signal word

Danger

Hazard statement(s)

H300

Fatal if swallowed.

H310

Fatal in contact with skin.

H330

Fatal if inhaled.

Precautionary statement(s)

P260

Do not breathe dust/fume/gas/mist/vapours/spray.

P264

Wash hands thoroughly after handling.

P280

Wear protective gloves/protective clothing.

P284

Wear respiratory protection.

P302 + P350

IF ON SKIN: Gently wash with plenty of soap and water.

P310

Immediately call a POISON CENTER or doctor/physician.

Hazard symbol(s)

T+

Very toxic

R-phrases(s)

R26/27/28

Very toxic by inhalation, in contact with skin and if swallowed.

S-phrases(s)

S28

After contact with skin, wash immediately with plenty of soap and water.

S36/37  
S45

Wear suitable protective clothing and gloves.  
In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

**Other hazards** - none

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### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Synonyms : L-Arterenol  
L-Noradrenaline  
Levarterenol  
(R)-4-(2-Amino-1-hydroxyethyl)-1,2-benzenediol

Formula :  $C_8H_{11}NO_3$   
Molecular Weight : 169,18 g/mol

CAS-No.	EC-No.	Index-No.	Classification	Concentration
<b>Norepinephrine</b>				
51-41-2	200-096-6	-	Acute Tox. 1; Acute Tox. 2; H300, H310, H330 T+, R26/27/28	-

For the full text of the H-Statements mentioned in this Section, see Section 16.

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### 4. 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. Take victim immediately to hospital. Consult a physician.

#### **In case of eye contact**

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

#### **If swallowed**

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

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### 5. FIRE-FIGHTING MEASURES

#### **Suitable extinguishing media**

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

#### **Special protective equipment for fire-fighters**

Wear self contained breathing apparatus for fire fighting if necessary.

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### 6. ACCIDENTAL RELEASE MEASURES

#### **Personal precautions**

Wear respiratory protection. Avoid dust formation. Avoid breathing dust. Ensure adequate ventilation. Evacuate personnel to safe areas.

#### **Environmental precautions**

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

#### **Methods and materials for containment and cleaning up**

Pick up and arrange disposal without creating dust. Keep in suitable, closed containers for disposal.

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### 7. HANDLING AND STORAGE

#### **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.

#### **Conditions for safe storage**

Store in cool place. Keep container tightly closed in a dry and well-ventilated place.

Recommended storage temperature: -20 °C

Light sensitive.

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

### **Personal protective equipment**

#### **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).

#### **Hand protection**

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

Handle with gloves.

#### **Eye protection**

Face shield and safety glasses

#### **Skin and body protection**

Choose body protection according to the amount and concentration of the dangerous substance at the work place.

#### **Hygiene measures**

Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product.

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## **9. PHYSICAL AND CHEMICAL PROPERTIES**

### **Appearance**

Form	crystalline
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### **Safety data**

pH	no data available
Melting point	220 °C
Boiling point	no data available
Flash point	no data available
Ignition temperature	no data available
Lower explosion limit	no data available
Upper explosion limit	no data available
Water solubility	no data available

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## **10. STABILITY AND REACTIVITY**

### **Chemical stability**

Stable under recommended storage conditions.

### **Conditions to avoid**

no data available

**Materials to avoid**

acids, Bases, Oxidizing agents

**Hazardous decomposition products**

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

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**11. TOXICOLOGICAL INFORMATION****Acute toxicity****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

Exposure during pregnancy can provoke uterine contractions which can result in fetal asphyxia.

**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****Inhalation**

May be fatal if inhaled. May cause respiratory tract irritation.

**Ingestion**

May be fatal if swallowed.

**Skin**

May cause skin irritation. May be fatal if absorbed through skin.

**Eyes**

May cause eye irritation.

**Signs and Symptoms of Exposure**

Headache, Palpitation

**Additional Information**

RTECS: DN5950000

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**12. ECOLOGICAL INFORMATION****Toxicity**

no data available

**Persistence and degradability**

no data available

**Bioaccumulative potential**

no data available

**Mobility in soil**

no data available

**PBT and vPvB assessment**

no data available

**Other adverse effects**

no data available

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### 13. DISPOSAL CONSIDERATIONS

**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.

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### 14. TRANSPORT INFORMATION

**ADR/RID**

UN-Number: 2811 Class: 6.1

Packing group: II

Proper shipping name: TOXIC SOLID, ORGANIC, N.O.S. (Norepinephrine)

**IMDG**

UN-Number: 2811 Class: 6.1

Packing group: II

EMS-No: F-A, S-A

Proper shipping name: TOXIC SOLID, ORGANIC, N.O.S. (Norepinephrine)

Marine pollutant: No

**IATA**

UN-Number: 2811 Class: 6.1

Packing group: II

Proper shipping name: Toxic solid, organic, n.o.s. (Norepinephrine)

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### 15. REGULATORY INFORMATION

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

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### 16. OTHER INFORMATION

**Text of H-code(s) and R-phrase(s) mentioned in Section 3**

Acute Tox.	Acute toxicity
H300	Fatal if swallowed.
H310	Fatal in contact with skin.
H330	Fatal if inhaled.
T+	Very toxic
R26/27/28	Very toxic by inhalation, in contact with skin and if swallowed.

**Further information**

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