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

Product name Ethambutol dihydrochloride

# 2. HAZARDS IDENTIFICATION

## Classification of the substance or mixture

According to Regulation (EC) No1272/2008 Reproductive toxicity (Category 1B)

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

May cause harm to the unborn child.

## Label elements Pictogram

Signal word Danger

Hazard statement(s)

H360

Precautionary statement(s) Obtain special instructions before use.

P201

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

Hazard symbol(s) T **Toxic** 

R-phrase(s) R61 May cause harm to the unborn child.

S22 Do not breathe dust. S36/37/39 Wear suitable protective clothing, gloves and eye/face protection. In case of accident or if you feel unwell, seek medical advice immediately S45

(show the label where possible). Restricted to professional users.

May damage fertility or the unborn child.

Avoid exposure - obtain special instructions before use.

2,2 '-(1,2-Ethanediyldiimino)bis-1-butanoldihydrochloride

Classification

Concentration

Other hazards - none

3. COMPOSITION/INFORMATION ON INGREDIENTS Synonyms

Molecular Weight

S-phrase(s)

S53

Formula C10H24N2O2 · 2HCl

277,23 g/mol

Emb

EC-No. CAS-No.  $[S\hbox{-}(R^*,\!R^*)]\hbox{-}2,\!2'\hbox{-}(Ethyle\,ne\,diimino) dibutan-1-ol\,dihydrochloride$ 

213-970-7 1070-11-7 Repr. 1B; H360 T, R61

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

4. FIRST AID MEASURES

If inhaled

General advice

If breathed in, move person into fresh air. If not breathing give artificial respiration Consult a physician. In case of skin contact

Wear self contained breathing apparatus for fire fighting if necessary.

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

Consult a physician. Show this safety data sheet to the doctor in attendance.

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.

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

## 6. ACCIDENTAL RELEASE MEASURES **Personal precautions**

Evacuate personnel to safe areas.

Precautions for safe handling

**Conditions for safe storage** 

5. FIRE-FIGHTING MEASURES

**Environmental precautions** 

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

Use personal protective equipment. Avoid dust formation. Avoid breathing dust. Ensure adequate ventilation.

Pick up and arrange disposal without creating dust. Keep in suitable, closed containers for disposal. 7. HANDLING AND STORAGE

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Methods and materials for containment and cleaning up

Special protective equipment for fire-fighters

Avoid formation of dust and aerosols. Avoid exposure - obtain special instructions before use. Provide appropriate exhaust ventilation at places where dust is formed. Normal measures for preventive fire protection.

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

Personal protective equipment

**Respiratory protection** 

### 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

# Hand protection

(EU).

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 Safety glasses with side-shields conforming to EN166

Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator

components tested and approved under appropriate government standards such as NIOSH (US) or CEN

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

9. PHYSICAL AND CHEMICAL PROPERTIES **Appearance** 

product.

Form

Safety data

Boiling point

Flash point

Conditions to avoid

Materials to avoid

Hydrogen chloride gas

no data available

no data available

Ignition temperature

рΗ no data available Melting point 198,5 - 202,6 °C

Lower explosion limit no data available Upper explosion limit no data available Water solubility soluble 10. STABILITY AND REACTIVITY Chemical stability Stable under recommended storage conditions.

solid

no data available

no data available

no data available

11. TOXICOLOGICAL INFORMATION **Acute toxicity** 

LD50 Oral - rat - 6.800 mg/kg

effect on seizure threshold.

LD50 Intraperitoneal - mouse - 1.000 mg/kg

Hazardous decomposition products

LD50 Subcutaneous - mouse - 1.800 mg/kg Skin corrosion/irritation no data available

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.

Remarks: Peripheral Nerve and Sensation:Local anesthetic. Behavioral:Tremor. Behavioral:Convulsions or

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

Genotoxicity in vivo - mouse - Oral Micronucleus test Genotoxicity in vivo - mouse - Oral

Reproductive toxicity Presumed human reproductive toxicant Specific target organ toxicity - single exposure

Potential health effects Inhalation May be harmful if inhaled. May cause respiratory tract irritation.

Gastrointestinal disturbance, Dermatitis, Blurred vision **Additional Information** RTECS: EL3854000

# Mobility in soil no data available

Persistence and degradability

**Bioaccumulative potential** 

PBT and vPvB assessment

no data available

Other adverse effects

Dispose of as unused product.

# **IMDG** Not dangerous goods

material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber. Observe all federal, state, and local environmental regulations.

15. REGULATORY INFORMATION

H360 Reproductive toxicity Repr.

May cause harm to the unborn child.

www.lookchem.com

WARRANTY:

For R&D use only. Not for drug, household or other uses.

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Lookchem shall not be held liable for any damage resulting from handling or from contact with the above product. See reverse side of invoice or packing slip for additional terms and conditions of sale.

Serious eye damage/eye irritation no data available Respiratory or skin sensitization no data available Germ cell mutagenicity

sperm

Carcinogenicity

Aspiration hazard no data available

no data available Specific target organ toxicity - repeated exposure no data available

May be harmful if swallowed. Ingestion Skin May be harmful if absorbed through skin. May cause skin irritation. May cause eye irritation. Eyes

Signs and Symptoms of Exposure

12. ECOLOGICAL INFORMATION **Toxicity** 

no data available

no data available

no data available

no data available

13. DISPOSAL CONSIDERATIONS **Product** Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the

Contaminated packaging

14. TRANSPORT INFORMATION

ADR/RID Not dangerous goods

**IATA** Not dangerous goods

16. OTHER INFORMATION

**Further information** 

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006. Text of H-code(s) and R-phrase(s) mentioned in Section 3 May damage fertility or the unborn child.

Toxic R61