

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

Product name : Ipratropium bromide monohydrate

## 2. HAZARDS IDENTIFICATION

### Classification of the substance or mixture

According to Regulation (EC) No1272/2008

Acute toxicity, Inhalation (Category 4)

Acute toxicity, Oral (Category 4)

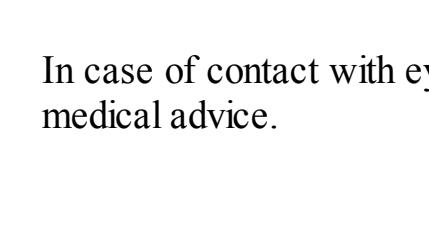
Eye irritation (Category 2)

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

Harmful by inhalation and if swallowed. Irritating to eyes.

### Label elements

Pictogram



Signal word : Warning

Hazard statement(s)

H302 Harmful if swallowed.

H319 Causes serious eye irritation.

H332 Harmful if inhaled.

Precautionary statement(s)

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)

Xn Harmful

R-phrase(s)

R20/22 Harmful by inhalation and if swallowed.

R36 Irritating to eyes.

S-phrase(s)

S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

Other hazards - none

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

Synonyms : Atropine isopropyl bromide

Formula : C20H30BrNO3 · H2O

Molecular Weight : 430,38 g/mol

CAS-No.	EC-No.	Classification	Concentration
66985-17-9	244-873-8	Acute Tox. 4; Eye Irrit. 2; H302, H319, H332 Xn, R20/22 - R36	-

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

## 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. 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.

## 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.

## 6. ACCIDENTAL RELEASE MEASURES

### Personal precautions

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

### Environmental precautions

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.

## 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.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Personal protective equipment

#### Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a dust mask type N95 (US) or type P1 (EN 143) 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

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

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### Appearance

Form : powder

Colour : white

### Safety data

pH : no data available

Melting point : 229 - 231 °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

## 10. STABILITY AND REACTIVITY

### Chemical stability

Stable under recommended storage conditions.

### Conditions to avoid

no data available

### Materials to avoid

Oxidizing agents

### Hazardous decomposition products

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

## 11. TOXICOLOGICAL INFORMATION

### Acute toxicity

LD50 Oral - rat - 1.663 mg/kg

Remarks: Behavioral:Ataxia. Behavioral:Convulsions or effect on seizure threshold.

LD50 Oral - mouse - 1.001 mg/kg

Remarks: Behavioral:Convulsions or effect on seizure threshold. Behavioral:Ataxia. Lungs, Thorax, or Respiration:Dyspnea.

LD50 Oral - rabbit - 1.557 mg/kg

Remarks: Behavioral:Tremor. Behavioral:Ataxia. Lungs, Thorax, or Respiration:Dyspnea.

LD50 Oral - dog - 1.300 mg/kg

Inhalation: no data available

LD50 Intraperitoneal - rat - 113 mg/kg

Remarks: Behavioral:Ataxia. Behavioral:Tetany. Lungs, Thorax, or Respiration:Dyspnea.

LD50 Subcutaneous - rat - 72 mg/kg

Remarks: Behavioral:Convulsions or effect on seizure threshold. Behavioral:Coma.

### Skin corrosion/irritation

no data available

### 严重 eye damage/eye irritation

Eyes - rabbit - Moderate/eye irritation - 24 h

### Respiratory or skin sensitization

no data available

### Skin and body protection

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

### Hygiene measures

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

## 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

### Potential health effects

Inhalation : Harmful if inhaled. May cause respiratory tract irritation.

Ingestion : Harmful if swallowed. May be harmful if absorbed through skin. May cause skin irritation.

Eyes : Causes eye irritation.

### Signs and Symptoms of Exposure

Headache, tachycardia, Palpitation, Drowsiness, Nausea, Vomiting, bronchitis, mouth, dryness, muscle tremors, convulsions, sensitivity to light, change in heart rate, diarrhea, Vomiting, sweating, dry mouth, dryness of the respiratory, pharynx and toxicological properties have not been thoroughly investigated.

Most of our knowledge, the chemical, physical and toxicological properties have not been thoroughly investigated.

## 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 or unused product

Dispose of as unused product.

## 14. TRANSPORT INFORMATION

### ADR/RID

Not dangerous goods

### IMDG

Not dangerous goods

### IATA

Not dangerous goods

## 15. REGULATORY INFORMATION

### This safety datasheet complies with Regulation (EC) No. 1907/2006.

## 16. OTHER INFORMATION

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

Acute Tox. : Acute toxicity

Eye Irrit. : Eye irritation

H302 : Harmful if swallowed.

H319 : Causes serious eye irritation.

Xn : Harmful

R20/22 : Irritating to eyes.

### Further information

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