



Health	2
Fire	1
Reactivity	0
Personal Protection	E

# Material Safety Data Sheet **Neostigmine Bromide MSDS**

# **Section 1: Chemical Product and Company Identification**

**Product Name:** Neostigmine Bromide

Catalog Codes: SLN2149

CAS#: 114-80-7

**RTECS:** BR3150000

**TSCA:** TSCA 8(b) inventory: No products were found.

CI#: Not available.

Contact Information:

Sciencelab.com. Inc. 14025 Smith Rd.

Houston, Texas 77396

US Sales: 1-800-901-7247

International Sales: 1-281-441-4400

Order Online: ScienceLab.com

CHEMTREC (24HR Emergency Telephone), call:

1-800-424-9300

Svnonvm:

Benzenaminium,3-[[(dimethylamino)carbonyl]oxy]-N,N,N-trimethylntenaidenal CHEMTREC, call: 1-703-527-3887

(m-Hydroxyphenyl)trimethylammonium bromide

dimethylcarbamate; 3-Dimethylcarbamoxyphenyl trimethyl ammonium bromide; 3-Hydroxyphenyltrimethylammonium

bromide dimethylcarbamic ester; Eustigmin bromide;

Leostigmine bromide; Kirkstigmine bromide; Neoserine

bromide; Neostigmine methyl bromide; Philostigmin bromide; Proserine bromide; Prostigmin bromide; Prostigmine bromide; Stigmanol bromide; Stigmosan bromide;

Syntostigmin bromide; Syntotstigmine bromide;

Vagostigmine bromide

Chemical Name: Ammonium, (m-hydroxyphenyl)trimethyl-

bromide, dimethylcarbamate

Chemical Formula: C12-H19-Br-N2-O2

For non-emergency assistance, call: 1-281-441-4400

# Section 2: Composition and Information on Ingredients

### Composition:

Name	CAS#	% by Weight
Neostigmine Bromide	114-80-7	100

Toxicological Data on Ingredients: Neostigmine Bromide: ORAL (LD50): Acute: 51 mg/kg [Rat]. 7 mg/kg [Mouse]. 7.449 mg/kg [Cat Cat].

# **Section 3: Hazards Identification**

### **Potential Acute Health Effects:**

Hazardous in case of ingestion. Slightly hazardous in case of skin contact (irritant), of eye contact (irritant), of

inhalation. Severe over-exposure can result in death.

#### **Potential Chronic Health Effects:**

CARCINOGENIC EFFECTS: Not available.
MUTAGENIC EFFECTS: Not available.
TERATOGENIC EFFECTS: Not available.
DEVELOPMENTAL TOXICITY: Not available.

Repeated exposure to a highly toxic material may produce general deterioration of health by an accumulation in one or many human organs.

one of many numan organs.

# **Section 4: First Aid Measures**

### **Eye Contact:**

Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention if irritation occurs.

**Skin Contact:** Wash with soap and water. Cover the irritated skin with an emollient. Get medical attention if irritation develops.

Serious Skin Contact: Not available.

### Inhalation:

If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

#### Serious Inhalation:

Evacuate the victim to a safe area as soon as possible. Loosen tight clothing such as a collar, tie, belt or waistband. If breathing is difficult, administer oxygen. If the victim is not breathing, perform mouth-to-mouth resuscitation. Seek medical attention.

#### Ingestion:

If swallowed, do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention immediately.

Serious Ingestion: Not available.

## **Section 5: Fire and Explosion Data**

Flammability of the Product: May be combustible at high temperature.

Auto-Ignition Temperature: Not available.

Flash Points: Not available.

Flammable Limits: Not available.

Products of Combustion: These products are carbon oxides (CO, CO2), nitrogen oxides (NO, NO2...), halogenated

compounds.

Fire Hazards in Presence of Various Substances: Slightly flammable to flammable in presence of heat.

### **Explosion Hazards in Presence of Various Substances:**

Risks of explosion of the product in presence of mechanical impact: Not available. Risks of explosion of the product in presence of static discharge: Not available.

#### Fire Fighting Media and Instructions:

SMALL FIRE: Use DRY chemical powder.

LARGE FIRE: Use water spray, fog or foam. Do not use water jet.

Special Remarks on Fire Hazards: As with most organic solids, fire is possible at elevated temperatures

Special Remarks on Explosion Hazards: Not available.

## **Section 6: Accidental Release Measures**

**Small Spill:** Use appropriate tools to put the spilled solid in a convenient waste disposal container.

### Large Spill:

Poisonous solid.

Stop leak if without risk. Do not get water inside container. Do not touch spilled material. Use water spray to reduce vapors. Prevent entry into sewers, basements or confined areas; dike if needed. Eliminate all ignition sources. Call for assistance on disposal.

# **Section 7: Handling and Storage**

#### Precautions:

Keep away from heat. Keep away from sources of ignition. Ground all equipment containing material. Do not ingest. Do not breathe dust. Wear suitable protective clothing. If ingested, seek medical advice immediately and show the container or the label.

Storage: Keep container tightly closed. Keep container in a cool, well-ventilated area.

# **Section 8: Exposure Controls/Personal Protection**

### **Engineering Controls:**

Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

**Personal Protection:** Safety glasses. Lab coat. Dust respirator. Be sure to use an approved/certified respirator or equivalent. Gloves.

#### Personal Protection in Case of a Large Spill:

Splash goggles. Full suit. Dust respirator. Boots. Gloves. A self contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

Exposure Limits: Not available.

# **Section 9: Physical and Chemical Properties**

Physical state and appearance: Solid.

Odor: Not available.

**Taste:** Not available.

Molecular Weight: 302.2 g/mole

Color: Not available.

**pH (1% soln/water):** Not available.

**Boiling Point:** Not available.

Melting Point: Not available.

Critical Temperature: Not available.

**Specific Gravity:** Not available.

Vapor Pressure: Not applicable.

Vapor Density: Not available.

Volatility: Not available.

Odor Threshold: Not available.

Water/Oil Dist. Coeff.: Not available.

Ionicity (in Water): Not available.

**Dispersion Properties:** Not available.

Solubility: Not available.

# Section 10: Stability and Reactivity Data

Stability: The product is stable.

**Instability Temperature:** Not available.

Conditions of Instability: Excess heat

Incompatibility with various substances: Not available.

**Corrosivity:** Not available.

Special Remarks on Reactivity: Not available.

Special Remarks on Corrosivity: Not available.

Polymerization: Will not occur.

# **Section 11: Toxicological Information**

Routes of Entry: Inhalation. Ingestion.

Toxicity to Animals: Acute oral toxicity (LD50): 7 mg/kg [Mouse].

Chronic Effects on Humans: Not available.

Other Toxic Effects on Humans:

Hazardous in case of ingestion.

Slightly hazardous in case of skin contact (irritant), of inhalation.

Special Remarks on Toxicity to Animals: Not available.

Special Remarks on Chronic Effects on Humans: Not available.

**Special Remarks on other Toxic Effects on Humans:** 

Acute Potential Health Effects: Skin: May cause skin irritation. Eyes: May cause eye irritation.

Inhalation: May cause respiratory tract irritation.

Ingestion: Harmful if swallowed. May cause gastrointestinal tract irritation with nausea, vomiting, hypermotility, diarrhea, abdominal cramps, involuntary defecation, excessive salivation, dysphagia, flatulence, increased gastric

and intestinal secretions. It may also affect the cardiovascular system (bradycardia, tachycardia, hypotension, ECG changes), behavior/central nervous system (headache, seizures, weakness, malaise dysarthria, dizziness, drowsiness, loss of consciousness), respiration (pharyngeal and bronchial secretions, bronchospasms, laryngospasm, dyspnea, central respiratory paralysis, respiratory depression or arrest, skeletal muscle paralysis), vision (double vision, lacrimation, visual changes, hyperemia of conjunctriva, musculoskeletal system (muscle weakness, muscle cramps or spasms, arthralgia). Other effects may include skin rashes, urinary frequency and incontinence, sweating, flushing, allergic reactions, anaphylaxis, urticaria.

Medical Conditions Aggravated by Exposure: Bronchial asthma, bradycardia, vagotonia, epilepsy,

hyperthyroidism, peptic ulcer, cardiac arrhythmias, or recent coronary occlusion.

# Section 12: Ecological Information

Ecotoxicity: Not available.

BOD5 and COD: Not available.

## **Products of Biodegradation:**

Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.

Toxicity of the Products of Biodegradation: The products of degradation are as toxic as the product itself.

Special Remarks on the Products of Biodegradation: Not available.

# **Section 13: Disposal Considerations**

### **Waste Disposal:**

Waste must be disposed of in accordance with federal, state and local environmental control regulations.

# **Section 14: Transport Information**

DOT Classification: CLASS 6.1: Poisonous material.

Identification: : Toxic Solid, organic, n.o.s (Neostigmine Bromide) UNNA: 2811 PG: III

Special Provisions for Transport: Not available.

# **Section 15: Other Regulatory Information**

Federal and State Regulations: No products were found.

## Other Regulations:

OSHA: Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200).

EINECS: This product is on the European Inventory of Existing Commercial Chemical Substances.

### Other Classifications:

WHMIS (Canada): CLASS D-1A: Material causing immediate and serious toxic effects (VERY TOXIC).

### DSCL (EEC):

R25- Toxic if swallowed.

S45- In case of accident or if you feel unwell,

seek medical advice immediately (show the

label where possible).

S46- If swallowed, seek medical advice

immediately and show this container or label.

HMIS (U.S.A.):

Health Hazard: 2

Fire Hazard: 1

Reactivity: 0

**Personal Protection: E** 

National Fire Protection Association (U.S.A.):

Health: 2

Flammability: 1

Reactivity: 0

Specific hazard:

# **Protective Equipment:**

Gloves.
Lab coat.
Dust respirator. Be sure to use an approved/certified respirator or equivalent. Wear appropriate respirator when ventilation is inadequate.
Safety glasses.

# **Section 16: Other Information**

References: Not available.

Other Special Considerations: Not available.

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