

ETHIDIUM BROMIDE

SECTION 1: PRODUCT IDENTIFICATION

Product Name: Ethidium bromide

Product Code: TMB 033

CAS#: 1239-45-8

Synonym: Homidium bromide

Chemical Name: 3,8-Diamino-5-ethyl-6-phenylphenanthridinium bromide

Chemical Formula: EtBr

Formula Weight: 394.31

SECTION 2: COMPOSITION/INFORMATION ON INGREDIENTS

Composition:

Name: Ethidium bromide

Toxicological Data on Ingredients: Acute Tox. 4; Acute Tox. 1; Muta. 2; H302, H330, H341

SECTION 3: HAZARDS IDENTIFICATION

Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

Potential Acute Health Effects:

Acute toxicity, Inhalation (Category 3), H331

Potential Chronic Health Effects: Not available.

Carcinogenic Effects: Not available.

Mutagenic Effects:

Germ cell mutagenicity (Category 2), H341

Teratogenic Effects: Not available.

Developmental Toxicity: Not available.

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.

Skin Contact: Wash off immediately with soap and plenty of water. Cover the irritated skin with emollient. Immediate medical attention is required.

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: Not Available.

Ingestion: 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 if symptoms appear.

Serious Ingestion: Not available.

SECTION 5: FIRE FIGHTING MEASURES

Suitable extinguishing media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.



Special hazards arising from the substance or mixture

Carbon oxides
Nitrogen oxides (NOx)
Hydrogen bromide gas
Carbon oxides
Nitrogen oxides (NOx)
Hydrogen bromide gas
Not combustible.
Ambient fire may liberate hazardous vapours.

Advice for firefighters

Stay in danger area only with self-contained breathing apparatus. Prevent skin contact by keeping a safe distance or by wearing suitable protective clothing.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal precautions and emergency procedures

Use personal protective equipment. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.

Environmental precautions

Do not let product enter drains.

Methods and materials for containment and cleaning up

Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions
Take up dry. Dispose of properly. Clean up affected area. Avoid generation of dusts.

SECTION 7: HANDLING AND STORAGE

Precautions for safe handling

Work under hood. Do not inhale substance/mixture. Avoid generation of vapours/aerosols.

Storage conditions:

Tightly closed. Keep in a well-ventilated place. Keep locked up or in an area accessible only to qualified or authorized persons.

Storage class:

Storage class (TRGS 510): 6.1D: Non-combustible, acute toxic Cat.3 / toxic hazardous materials or hazardous materials causing chronic effects

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Eye/face protection

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.

Respiratory protection

Respiratory protection is not required. If protection from nuisance levels of dusts are desired, use type N95 or type P1 (EN 143) dust masks. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Physical state and appearance : Powder
Odor : Not available



Color	:	Red
Molecular Weight	:	Not available
pH	:	Not available
Boiling Point	:	Not available
Melting Point	:	Not available
Critical Temperature	:	Not available
Specific Gravity	:	Not available
Vapor Pressure	:	Not available
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 chemically stable under standard ambient conditions (room temperature).

Instability Temperature: Not available

Conditions of Instability: Not available

Incompatibility with various substances: Strong oxidizing agents

Special Remarks on Corrosivity: Non corrosive.

Special Remarks on Reactivity: Not available

Possibility of hazardous reactions: Violent reactions possible with: The generally known reaction partners of water.

Hazardous decomposition products: In case of fire.

SECTION 11: TOXICOLOGICAL INFORMATION.

Acute Toxicity: No data available

Inhalation: No data available

Dermal: No data available

Routes of Entry: Inhalation, Ingestion

Toxicity to Animals:

Acute toxicity estimate Oral - > 2.000 mg/kg

(Calculation method)

Oral: No data available

Acute toxicity estimate Inhalation - 4 h - 0,51 mg/l - dust/mist(Calculation method)

Inhalation: No data available

Dermal: No data available

LD50 Subcutaneous - Mouse - 110 mg/kg (Ethidium bromide)

Chronic Effects on Humans: Not available

Other Toxic Effects on Humans: Not available

Special Remarks on Toxicity to Animals: Not available

Special Remarks on other Toxic Effects on Humans: Not available

Potential Health Effects: Suspected of causing genetic defects.

Test Type: Ames test

Test system: Salmonella typhimurium

Result: positive

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity: Not available.



BOD and COD: Not available
Products of Biodegradation: Not available
Toxicity of the Products of Biodegradation: Not available
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

UN number:

ADR/RID: 2810 **IMDG:** 2810 **IATA:** 2810

UN proper shipping name

ADR/RID: TOXIC ORGANIC, N.O.S. (Ethidium bromide)

IMDG: TOXIC ORGANIC, N.O.S. (Ethidium bromide)

IATA: No TOXIC ORGANIC, N.O.S. (Ethidium bromide)

Transport hazard class(es):

ADR/RID: 6.1 **IMDG:** 6.1 **IATA:** 6.1

Packaging group:

ADR/RID: III **IMDG:** III **IATA:** III

Environmental hazards:

ADR/RID: no **IMDG Marine pollutant:** no **IATA:** no

SECTION 15: REGULATORY INFORMATION

Safety, health and environmental regulations/legislation specific for the substance or mixture

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

Other regulations

Observe work restrictions regarding maternity protection in accordance to Dir 92/85/EEC or stricter national regulations where applicable.

Chemical Safety Assessment

For this product a chemical safety assessment was not carried out

SECTION 16: OTHER INFORMATION

References: Full text of H AND R-Statements:

H302 Harmful if swallowed.

H330 Fatal if inhaled.

H331 Toxic if inhaled.

H341 Suspected of causing genetic defects.

Other Special Considerations: Not available

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