

Safety Data Sheet (SDS)

8/19/2024: File reviewed, more current MSDS/SDS not available. CAS

SECTION 1 — CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Pyridinium Tribromide

Signal Word
DANGER

Flinn Scientific, Inc. P.O. Box 219, Batavia, IL 60510 (800) 452-1261

Chemtrec Emergency Phone Number: (800) 424-10201

Pictograms

SECTION 2 — HAZARDS IDENTIFICATION

Hazard class: Skin corrosion or irritation (Category 1). Causes severe skin burns and eye damage (H314). Do not breathe dust or fumes (P260).



Hazard class: Serious eye damage or irritation (Category 1). Causes serious eye damage (H318).

Pyridinium tribromide is a solid used as a safer or "greener" alternative to elemental bromine, which is volatile, highly corrosive, and fatal if inhaled. Pyridinium tribromide exists in rapid equilibrium with bromine in solution and thus slowly releases bromine when dissolved. Treat with care and do not use with metals.

SECTION 3 — COMPOSITION, INFORMATION ON INGREDIENTS

Component Name	CAS Number	Formula	Formula Weight	Concentration
Pyridinium tribromide	39416-48-3	C ₅ H ₅ N-HBr-Br ₂	319.821	

SECTION 4 — FIRST AID MEASURES

Immediately call a POISON CENTER or physician (P310).

If inhaled: Remove victim to fresh air and keep at rest in a position comfortable for breathing (P304+P340).

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing (P305+P351+P338). **If on skin or hair:** Immediately remove all contaminated clothing. Rinse skin with water (P303+P361+P353). Wash contaminated clothing before reuse (P363).

If swallowed: Rinse mouth. Do NOT induce vomiting (P301+P330+P331).

SECTION 5 — FIRE FIGHTING MEASURES

Nonflammable, noncombustible solid.

NFPA Code

When heated to decomposition, may emit toxic fumes.
In case of fire: Use a tri-class dry chemical fire extinguisher.

None established

SECTION 6 — ACCIDENTAL RELEASE MEASURES

Do not allow solid to become airborne. Wipe up dust with a damp paper towel to avoid generating dust. Place in a sealed bag or container and dispose. Wash spill site after material pickup is complete. See Sections 8 and 13 for further information.

SECTION 7 — HANDLING AND STORAGE

Flinn Suggested Chemical Storage Pattern: Inorganic #2. Store with acetates, halides, sulfates, sulfites, and halogens. Store in a cool, dry place. Do not use aluminum or galvanized containers.

SECTION 8 — EXPOSURE CONTROLS, PERSONAL PROTECTION

Wear protective gloves, protective clothing, and eye protection (P280). Wash thoroughly after handling (P264).

SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES

Yellow to deep yellow red crystalline powder. Melting point: 130 °C (decomposes)
Odorless.
Soluble in glacial acetic acid, ethyl alcohol, and related solvents. Slightly soluble in water.

SECTION 10 — STABILITY AND REACTIVITY

Do not use with aluminum, mild steel or galvanized containers. Reacts with strong bases and strong oxidizing agents. Shelf life: Fair, store in a cool, dry place.

SECTION 11 — TOXICOLOGICAL INFORMATION

Acute effects: Lachrymator. Serious eye damage and skin burns. Mucous membrane irritation and possible tissue corrosion. ORL-RAT LD₅₀: N.A.
IHL-RAT LC₅₀: N.A.
SKN-RBT LD₅₀: N.A.
Chronic effects: Erosion of teeth, ulceration of mouth lining. Asthma-like symptoms
Target organs: Eyes, skin, respiratory system, mouth, teeth.

SECTION 12 — ECOLOGICAL INFORMATION

Toxic to aquatic organisms.

SECTION 13 — DISPOSAL CONSIDERATIONS

Please review all federal, state and local regulations that may apply before proceeding.
Flinn Suggested Disposal Method #26c is one option.

SECTION 14 — TRANSPORT INFORMATION

Shipping name: Pyridinium tribromide. Hazard class: 8. UN number: UN3261.

SECTION 15 — REGULATORY INFORMATION

TSCA, EINECS listed.

SECTION 16 — OTHER INFORMATION

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N.A. = Not available, not all health aspects of this substance have been fully investigated.

N/A = Not applicable

Consult your copy of the Flinn Science Catalog/Reference Manual for additional information about laboratory chemicals.

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