

Common Name: **SODIUM BROMATE**

Synonyms: None

CAS No: 7789-38-0

Molecular Formula: NaBrO₃

RTK Substance No: 1686

Description: Colorless to white, crystalline or granular, odorless powder

HAZARD DATA

Hazard Rating	Firefighting	Reactivity
<p>2 - Health</p> <p>0 - Fire</p> <p>0 - Reactivity</p> <p>DOT#: UN 1494</p> <p>ERG Guide #: 141</p> <p>Hazard Class: 5.1 (Oxidizer)</p>	<p>Sodium Bromate is not combustible but it is a STRONG OXIDIZER which enhances the combustion of other substances.</p> <p>Use water only. DO NOT USE DRY CHEMICAL or CO₂ extinguishing agents.</p> <p>POISONOUS GASES ARE PRODUCED IN FIRE, including <i>Hydrogen Bromide</i>.</p> <p>CONTAINERS MAY EXPLODE IN FIRE.</p> <p>Use water spray to keep fire-exposed containers cool.</p> <p>Sodium Bromate may ignite combustibles (wood, paper and oil).</p> <p>Contamination may cause containers to explode.</p>	<p>Sodium Bromate reacts violently with REDUCING AGENTS (such as LITHIUM, SODIUM, POTASSIUM and their HYDRIDES); COMBUSTIBLE MATERIALS; ORGANICS (such as OIL, FAT, GREASE and FUELS); METAL POWDERS (such as ALUMINUM, ARSENIC and COPPER); POTASSIUM; METAL SULFIDES; CARBON; SUGAR; and AMMONIUM SALTS.</p> <p>Sodium Bromate will become shock sensitive if contaminated with ORGANIC MATERIALS, METALS or CARBON.</p>

SPILL/LEAKS

Isolation Distance:

Spill: 25 meters (75 feet)

Fire: 800 meters (1/2 mile)

Moisten spilled material first or use a HEPA-filter vacuum for clean-up and place into sealed containers for disposal. **DO NOT** use combustible absorbents. **DO NOT** wash into sewer.

PHYSICAL PROPERTIES

Odor Threshold:	Odorless
Flash Point:	Noncombustible
Specific Gravity:	3.34 (water = 1)
Water Solubility:	Soluble
Boiling Point:	718°F (381°C) (Decomposes)
Molecular Weight:	150.9

EXPOSURE LIMITS

The Protective Action Criteria values are:

PAC-1 = 1.5 mg/m³

PAC-2 = 12.5 mg/m³

PAC-3 = 60 mg/m³

PROTECTIVE EQUIPMENT

Gloves:	Nitrile and Natural Rubber
Coveralls:	Tyvek®
Respirator:	>1.5 mg/m ³ - SCBA

HEALTH EFFECTS

Eyes:	Irritation
Skin:	Irritation
Inhalation:	Nose, throat and lung irritation with coughing, wheezing and severe shortness of breath (pulmonary edema) Headache, fatigue and blue color to the skin and lips (<i>methemoglobinemia</i>)

FIRST AID AND DECONTAMINATION

- Remove** the person from exposure.
- Flush** eyes with large amounts of water for at least 15 minutes. Remove contact lenses if worn.
- Quickly** remove contaminated clothing and wash contaminated skin with large amounts of water.
- Begin** artificial respiration if breathing has stopped and CPR if necessary.
- Transfer** promptly to a medical facility.
- Medical** observation is recommended as symptoms may be delayed.