

Common Name: **AMMONIUM BISULFITE**

Synonyms: Ammonium Hydrogen Sulfite; Ammonium Sulfite

CAS No: 10192-30-0

Molecular Formula:  $NH_4HSO_3$

RTK Substance No: 0090

Description: Colorless to yellow, crystalline solid that is commonly used in a water solution

### HAZARD DATA

Hazard Rating	Firefighting	Reactivity
<p><b>3 - Health</b></p> <p><b>0 - Fire</b></p> <p><b>0 - Reactivity</b></p> <p>DOT#: UN 2693</p> <p>ERG Guide #: 154</p> <p>Hazard Class: 8 (Corrosive)</p>	<p>Extinguish fire using an agent suitable for type of surrounding fire. <b>Ammonium Bisulfite</b> itself does not burn.</p> <p>POISONOUS GASES ARE PRODUCED IN FIRE, including <i>Sulfur Oxides</i>, <i>Nitrogen Oxides</i> and <i>Ammonia</i>.</p> <p>Use water spray to keep fire-exposed containers cool.</p>	<p><b>Ammonium Bisulfite</b> reacts with WATER, STEAM and STRONG ACIDS (such as HYDROCHLORIC, SULFURIC and NITRIC) to form <i>Ammonia</i> and other toxic gases.</p> <p><b>Ammonium Bisulfite</b> reacts violently with OXIDIZING AGENTS (such as PERCHLORATES, PEROXIDES, PERMANGANATES, CHLORATES, NITRATES, CHLORINE, BROMINE and FLUORINE) to form flammable and reactive gases.</p> <p><b>Ammonium Bisulfite</b> is not compatible with LEAD DIACETATE; ALUMINUM; and MERCURY CHLORIDE.</p>

### SPILL/LEAKS

**Isolation Distance:**

Spill: 25 meters (75 feet)

Fire: 800 meters (1/2 mile)

Absorb liquids in vermiculite, dry sand, earth, or a similar material and place into sealed containers for disposal.

Collect powdered material in the most convenient and safe manner and place into sealed containers for disposal.

DO NOT wash into sewer.

### PHYSICAL PROPERTIES

**Flash Point:** Nonflammable

**Specific Gravity:** 2 (water = 1)

**Water Solubility:** Soluble

**Boiling Point:** 302°F (150°C) (Sublimes)

**Molecular Weight:** 99.1

### EXPOSURE LIMITS

The Protective Action Criteria values are:

PAC-1 = 30 mg/m<sup>3</sup>

PAC-2 = 330 mg/m<sup>3</sup>

PAC-3 = 2,000 mg/m<sup>3</sup>

### PROTECTIVE EQUIPMENT

**Gloves:** Nitrile and Neoprene

**Coveralls:** Tyvek®

**Respirator:** Full facepiece APR with High efficiency filter or Supplied air

### HEALTH EFFECTS

**Eyes:** Irritation and burns

**Skin:** Irritation and burns

**Inhalation:** Nose, throat and lung irritation with coughing and severe shortness of breath (pulmonary edema)

### FIRST AID AND DECONTAMINATION

**Remove** the person from exposure.

**Flush** eyes with large amounts of water for at least 30 minutes. Remove contact lenses if worn. Seek medical attention immediately

**Quickly** remove contaminated clothing and wash contaminated skin with large amounts of water. Seek medical attention.

**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.