

Common Name: **HYDROXYLAMINE SULFATE**

Synonym: Oxammonium Sulfate

CAS No: 10039-54-0

Molecular Formula: $\text{H}_8\text{N}_2\text{SO}_6$

RTK Substance No: 1020

Description: Colorless to white, crystalline solid or powder

HAZARD DATA

Hazard Rating	Firefighting	Reactivity
3 - Health 1 - Fire 3 - Reactivity DOT#: UN 2865 ERG Guide #: 154 Hazard Class: 8 (Corrosive)	COMBUSTIBLE SOLID Hydroxylamine Sulfate is REACTIVE and a DANGEROUS EXPLOSION HAZARD when exposed to HEAT. Use dry chemical, CO_2 , water spray or foam as extinguishing agents. DO NOT USE WATER directly on Hydroxylamine Sulfate . POISONOUS GASES ARE PRODUCED IN FIRE, including <i>Sulfur Oxides</i> , <i>Sulfuric Acid</i> , and <i>Nitrogen Oxides</i> . CONTAINERS MAY EXPLODE IN FIRE. Use water spray to keep fire-exposed containers cool.	Hydroxylamine Sulfate may decompose to form extremely unstable <i>Hydroxylamine</i> on exposure to CARBON DIOXIDE; MOIST AIR; and WATER; or in the presence of STRONG BASES (such as SODIUM HYDROXIDE and POTASSIUM HYDROXIDE) and ALKALINE EARTH METALS (such as BERYLLIUM, MAGNESIUM and CALCIUM). Hydroxylamine Sulfate is not compatible with METALS; METAL SALTS; REDUCING AGENTS (such as LITHIUM, SODIUM, ALUMINUM and their HYDRIDES); and OXIDIZING AGENTS (such as PERCHLORATES, PEROXIDES, PERMANGANATES, CHLORATES, NITRATES, CHLORINE, BROMINE and FLUORINE). Violent decomposition may occur above 338° (170°C).

SPILL/LEAKS

Isolation Distance:

Spill: 25 meters (75 feet)

Fire: 800 meters (1/2 mile)

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

Keep **Hydroxylamine Sulfate** out of confined spaces, such as sewers, because of the possibility of an explosion.

DO NOT wash into sewer.

Hydroxylamine Sulfate is toxic to aquatic organisms.

PHYSICAL PROPERTIES

Vapor Density: 1.9 (air = 1)

Specific Gravity: >1 (water = 1)

Water Solubility: Soluble

Melting Point: 338°F (170°C)

Molecular Weight: 164.1

EXPOSURE LIMITS

The Protective Action Criteria values are:

PAC-1 = 10 mg/m^3

PAC-2 = 75 mg/m^3

PAC-3 = 400 mg/m^3

PROTECTIVE EQUIPMENT

Gloves: Butyl, Nitrile and Neoprene

Coveralls: Tyvek®

Respirator: $>10 \text{ mg/m}^3$ - SCBA

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)
Methemoglobinemia with headache, fatigue and blue color to the skin and lips

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 soap and water. Seek medical attention immediately.

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.