

Common Name: **ARSENIC DISULFIDE**

Synonyms: Red Arsenic Glass; Realgar

CAS No: 56320-22-0

 Molecular Formula: As_2S_2

RTK Substance No: 0156

Description: Reddish brown, odorless solid

HAZARD DATA

Hazard Rating	Firefighting	Reactivity
3 - Health 0 - Fire 0 - Reactivity DOT#: UN 1557 ERG Guide #: 152 Hazard Class: 6.1 (Poison)	Extinguish fire using an agent suitable for type of surrounding fire. Arsenic Disulfide itself does not burn. POISONOUS GASES ARE PRODUCED IN FIRE, including <i>Sulfur Oxides</i> and <i>Arsenic fumes</i> . Use water spray to keep fire-exposed containers cool.	Arsenic Disulfide may react violently with OXIDIZING AGENTS (such as PERCHLORATES, PEROXIDES, PERMANGANATES, CHLORATES, NITRATES, CHLORINE, BROMINE and FLUORINE); BROMINE AZIDE; SODIUM SULFIDE; SULFUR; and POTASSIUM NITRATE. Arsenic Disulfide reacts with STRONG ACIDS (such as HYDROCHLORIC, SULFURIC and NITRIC) and ACID FUMES to form toxic <i>Arsenic</i> , <i>Hydrogen Sulfide</i> and <i>Sulfur Dioxide fumes</i> and <i>vapors</i> . Contact with WATER or STEAM releases toxic <i>Hydrogen Sulfide gas</i> .

SPILL/LEAKS

Isolation Distance:

Spills: 25 to 50 meters (80 to 160 feet)

Fire: 800 meters (1/2 mile)

Collect solid material in the most convenient and safe manner, or use a HEPA-filter vacuum to clean-up, and deposit in sealed containers.

Harmful to aquatic life at very low concentrations.

PHYSICAL PROPERTIES

Odor Threshold:	Odorless
Flash Point:	Nonflammable
Vapor Pressure:	<0 mm Hg at 68°F (20°C)
Specific Gravity:	3.5 (water = 1)
Water Solubility:	Insoluble
Boiling Point:	1,049°F (565°C)
Melting Point:	585°F (307°C)
Molecular Weight:	214

EXPOSURE LIMITS

OSHA:	0.01 mg/m ³ , 8-hr TWA
NIOSH:	0.002 mg/m ³ , 15-min Ceiling
ACGIH:	0.01 mg/m ³ , 8-hr TWA
IDLH LEVEL:	5 mg/m ³
	(All of the above are for <i>inorganic Arsenic compounds</i> measured as <i>Arsenic</i>)

PROTECTIVE EQUIPMENT

Gloves:	Nitrile and Natural Rubber
Coveralls:	DuPont Tyvek®
Respirator:	<0.1 mg/m ³ - APR with High efficiency filter <0.5 mg/m ³ - Supplied air

HEALTH EFFECTS

Eyes:	Irritation, burns, red and watery eyes
Skin:	Irritation, burns, itching, rash and loss of pigment
Inhalation:	Nose and throat irritation with coughing, wheezing, and hoarseness Weakness, nausea and vomiting, headache and muscle cramps
Chronic:	<i>Arsenic compounds</i> cause lung and skin cancer in humans

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. Seek medical attention.

Quickly remove contaminated clothing and wash contaminated skin with large amounts of soap and water.

Begin artificial respiration if breathing has stopped and CPR if necessary.

Transfer to a medical facility.