

SILVER NITRATE**1116**

March 1998

CAS No: 7761-88-8
 RTECS No: VW4725000
 UN No: 1493
 EC No: 047-001-00-2

AgNO₃
 Molecular mass: 169.89

TYPES OF HAZARD/ EXPOSURE	ACUTE HAZARDS/SYMPTOMS	PREVENTION	FIRST AID/FIRE FIGHTING
FIRE	Not combustible but enhances combustion of other substances. Gives off irritating or toxic fumes (or gases) in a fire.	NO contact with flammable substances.	Water in large amounts. In case of fire in the surroundings: all extinguishing agents allowed.
EXPLOSION			In case of fire: keep drums, etc., cool by spraying with water.

EXPOSURE		PREVENT DISPERSION OF DUST! STRICT HYGIENE!	
Inhalation	Sore throat. Cough. Burning sensation. Shortness of breath. Laboured breathing. Blue lips or finger nails. Blue skin. Dizziness. Headache. Nausea. Confusion. Convulsions. Unconsciousness. Symptoms may be delayed (see Notes).	Local exhaust or breathing protection.	Fresh air, rest. Artificial respiration may be needed. Refer for medical attention.
Skin	Pain. Redness. Skin burns. Blisters. (Further see Inhalation).	Protective gloves. Protective clothing.	First rinse with plenty of water, then remove contaminated clothes and rinse again. Refer for medical attention.
Eyes	Redness. Pain. Severe deep burns. Loss of vision.	Face shield, or eye protection in combination with breathing protection if powder.	First rinse with plenty of water for several minutes (remove contact lenses if easily possible), then take to a doctor.
Ingestion	Abdominal pain. Burning sensation. Shock or collapse. (Further see Inhalation).	Do not eat, drink, or smoke during work.	Rinse mouth. Do NOT induce vomiting. Refer for medical attention.

SPILLAGE DISPOSAL	PACKAGING & LABELLING
Sweep spilled substance into sealable containers; if appropriate, moisten first to prevent dusting. Wash away remainder with plenty of water. Do NOT absorb in saw-dust or other combustible absorbents. Do NOT let this chemical enter the environment. Personal protection: complete protective clothing including self-contained breathing apparatus.	C Symbol N Symbol R: 34-50/53 S: (1/2-)26-45-60-61 UN Hazard Class: 5.1 UN Pack Group: II

EMERGENCY RESPONSE	SAFE STORAGE
Transport Emergency Card: TEC (R)-51GO2-I+II+III NFPA Code: H1; F0; R0; OX	Separated from combustible and reducing substances. See Chemical Dangers. Keep in the dark. Well closed.

IMPORTANT DATA

Physical State; Appearance

ODOURLESS, COLOURLESS OR WHITE CRYSTALS.

Chemical dangers

The substance decomposes on heating producing toxic fumes including nitrogen oxides. The substance is a strong oxidant and reacts violently with combustible and reducing materials. Reacts with incompatible substances such as acetylene, alkalis, halides and many other compounds causing fire and explosion hazard. Attacks some forms of plastics, rubber and coatings.

Occupational exposure limits

TLV: (as Ag) 0.01 mg/m³ as TWA; (ACGIH 2004).
MAK: (Inhalable fraction) 0.01 mg/m³; Peak limitation category: I(2); Pregnancy risk group: IIc; (DFG 2004).

Routes of exposure

The substance can be absorbed into the body by inhalation of its aerosol and by ingestion.

Inhalation risk

Evaporation at 20°C is negligible; a harmful concentration of airborne particles can, however, be reached quickly on spraying or when dispersed, especially if powdered.

Effects of short-term exposure

The substance is corrosive to the eyes, the skin and the respiratory tract. Corrosive on ingestion. The substance may cause effects on the blood, resulting in formation of methaemoglobin. The effects may be delayed. Medical observation is indicated.

Effects of long-term or repeated exposure

The substance may have effects on the blood, resulting in formation of methaemoglobin. Inhalation or ingestion can lead to generalized argyria, grey discolouration of the eyes and the skin and brown fingernails.

PHYSICAL PROPERTIES

Decomposes below boiling point at 444°C
Melting point: 212°C

Solubility in water: very good

ENVIRONMENTAL DATA

The substance is very toxic to aquatic organisms.

NOTES

Depending on the degree of exposure, periodic medical examination is suggested.
Specific treatment is necessary in case of poisoning with this substance; the appropriate means with instructions must be available.
Rinse contaminated clothes (fire hazard) with plenty of water.
Card has been partly updated in October 2004. See sections Occupational Exposure Limits, EU classification, Emergency Response.

ADDITIONAL INFORMATION

LEGAL NOTICE

Neither the EC nor the IPCS nor any person acting on behalf of the EC or the IPCS is responsible