

SILVER SULFATE

Material Safety Data Sheet

Mallinckrodt Chemical Inc.

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Emergency Telephone Number

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Effective Date: 04-06-89 Supersedes 08-01-85

PRODUCT IDENTIFICATION:

Synonyms: Sulfuric Acid, disilver (1+) salt

Formula CAS No.: 10294-26-5

Molecular Weight: 311.74

Hazardous Ingredients: Silver sulfate

Chemical Formula: Ag₂ SO₄

PRECAUTIONARY MEASURES

WARNING! HARMFUL IF SWALLOWED.

Wash thoroughly after handling.

EMERGENCY FIRST AID

If swallowed, induce vomiting immediately by giving two glasses of water and sticking finger down throat. Never give anything by mouth to an unconscious person.

SEE SECTION 5.

Physical Data

SECTION 1

Appearance: Crystals or crystalline powder.

Odor: Odorless.

Solubility: Slowly soluble in 125 parts water.

Boiling Point: Decomposes at 1085 C
(1985 F)Vapor Density (Air=1): No information
found.

Melting Point: 652 C (1206 F)

Vapor Pressure (mm Hg): No information
found.

Relative Density: 5.45 at 29 C (84 F)

Evaporation Rate: No information
found.

Fire and Explosion

SECTION 2

Information-----
Fire:

Not considered to be a fire hazard.

Explosion:

Not considered to be an explosion hazard.

Fire Extinguishing Media:

Use any means suitable for extinguishing
surrounding fire.

Special Information:

In the event of a fire, wear full protective
clothing and NIOSH-approved self-contained
breathing apparatus with full facepiece operated
in the pressure demand or other positive pressure
mode.

Reactivity Data

SECTION 3

Stability:

Stable under ordinary conditions of use and storage. Darkens on exposure to air or light.

Hazardous Decomposition Products:

Silver fume and oxides of sulfur.

Hazardous Polymerization:

Will not occur.

Incompatibilities:

No information found.

Leak/Spill Disposal Information

SECTION 4

Isolate or enclose the area of the leak or spill. Clean-up personnel require protective clothing and respiratory protection from dust. Sweep or scoop up and place in a suitable container for reclamation or disposal. Vacuuming or wet sweeping may be used to avoid dust dispersal. Whatever cannot be saved for reclamation may be sent to an RCRC-approved disposal facility. May be sent to a licensed silver recovery firm or back to the supplier.

Ensure compliance with local, state and federal regulations.

Health Hazard Information

SECTION 5

A. Exposure/Health Effects

Inhalation:

Exposures above the TLV may result in accumulation of silver in the body (argyria). Symptoms may include a permanent unsightly blue-gray pigmentation of the skin, mucous membranes and eyes.

Ingestion:

Irritant to the mouth, throat, and stomach. Symptoms may include abdominal spasms, faintness, muscular spasms and argyria.

Skin Contact:

May cause irritation.

Eye Contact:

May cause irritation, discoloration.

Chronic Exposure:

Prolonged or repeated inhalation, application or ingestion of silver compounds may cause a permanent bluish discoloration of the skin and mucous membranes.

Aggravation of

Pre-existing Conditions:

Persons with pre-existing skin conditions may be more susceptible to the effects of this substance.

B. FIRST AID

Inhalation:

Remove to fresh air. Get medical attention for any breathing difficulty.

Ingestion:

If swallowed, induce vomiting immediately by giving two glasses of water and sticking finger down throat. Never give anything by mouth to an unconscious person. Call physician immediately.

Skin Exposure:

Wash exposed area with soap and water. Get medical advice if irritation develops.

Eye Exposure:

Wash thoroughly with running water. Get medical advice if irritation develops.

C. TOXICITY

(RTECS, 1986)

No information found.

Occupational Control Measures

SECTION 6

Airborne Exposure Limits:

-OSHA Permissible Exposure Limit (PEL): 0.01 mg/m³ (TWA) for silver metal dust and fume as Ag
 -ACGIH Threshold Limit Value (TLV): 0.01 mg /m³ (TWA) for soluble silver compounds as Ag

Ventilation System:

A system of local and/or general exhaust is recommended to keep employee exposures below the Airborne Exposure Limits. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area. Please refer to the ACGIH document, "Industrial Ventilation, A Manual of Recommended Practices", most recent edition, for details.

Personal Respirators
(NIOSH Approved)

If the TLV is exceeded a full facepiece chemical cartridge respirator may be worn, in general, up to 100 times the TLV or the maximum use concentration specified by the respirator supplier, whichever is less. Alternatively, a supplied air full facepiece respirator or airlined hood may be worn.

Skin Protection:

Wear protective gloves and clean body-covering clothing.

Eye Protection:

Use chemical safety goggles. Contact lenses should not be worn when working with this material. Maintain eye wash fountain and quick-drench facilities in work area.

Storage and Special Information

SECTION 7

Keep in a tightly closed container, stored in a cool, dry, ventilated area. Protect against physical damage. Store in the dark.

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 SILVS

Addendum to Material Safety Data Sheet

REGULATORY STATUS

This Addendum Must Not Be
 Detached from the MSDS
 Identifies SARA 313 substance(s)

Any copying or redistribution of the MSDS
 must include a copy of this addendum

Hazard Categories for SARA
 Section 311/312 Reporting

