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MSDS**Material Safety Data Sheet**

From: Mallinckrodt Baker, Inc.
222 Red School Lane
Phillipsburg, NJ 08865



**Mallinckrodt
CHEMICALS**

24 Hour Emergency Telephone: 908-959-2151
CHEMTREC: 1-800-424-9300

National Response in Canada
CANUTEC: 613-996-6666

Outside U.S. and Canada
Chemtrec: 703-527-3887

NOTE: CHEMTREC, CANUTEC and National Response Center emergency numbers to be used only in the event of chemical emergencies involving a spill, leak, fire, exposure or accident involving chemicals.

All non-emergency questions should be directed to Customer Service (1-800-582-2537) for assistance.

SILVER CHLORIDE

1. Product Identification

Synonyms: Silver monochloride

CAS No.: 7783-90-6

Molecular Weight: 143.32

Chemical Formula: AgCl

Product Codes: Product Codes: 2142

2. Composition/Information on Ingredients

Ingredient	CAS No	Percent	Hazardous
-----	-----	-----	-----
Silver Chloride	7783-90-6	100%	No

3. Hazards Identification

Emergency Overview

As part of good industrial and personal hygiene and safety procedure, avoid all unnecessary exposure to the chemical substance and ensure prompt removal from skin, eyes and clothing.

Potential Health Effects

Inhalation:

No adverse health effects expected. Treat as a nuisance dust. Nuisance dust, may cause coughing or sneezing due to mild irritation.

Ingestion:

Not expected to be a health hazard via ingestion. Low toxicity due to insolubility. Possible moderate gastrointestinal discomfort following a large ingestion.

Skin Contact:

No adverse effects expected.

Eye Contact:

No adverse effects expected but dust may cause mechanical irritation.

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:

No adverse health effects expected.

4. First Aid Measures

Inhalation:

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

Ingestion:

Give several glasses of water to drink to dilute. If large amounts were swallowed, get medical advice.

Skin Contact:

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

Eye Contact:

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

5. Fire Fighting Measures

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.

6. Accidental Release Measures

Ventilate area of leak or spill. Wear appropriate personal protective equipment as specified in Section 8. Spills: Sweep up and containerize for reclamation or disposal. Vacuuming or wet sweeping may be used to avoid dust dispersal. Contain and recover spills when possible. Ventilate area or leak or spill. Clean-up personnel may require protective clothing and respiratory protection from dust. Spills: Sweep up and containerize for reclamation or disposal. Avoid dust dispersal. Disposal: Whatever cannot be saved for reclamation may be disposed as hazardous waste in a RCRA approved waste disposal facility.

7. Handling and Storage

Keep in a tightly closed light-resistant container, stored in a cool, dry, ventilated area. Protect against physical damage. Isolate from incompatibles, moisture and sources of heat. Containers of this material may be hazardous when empty since they retain product residues (dust, solids); observe all warnings and precautions listed for the product.

8. Exposure Controls/Personal Protection

Airborne Exposure Limits:

OSHA Permissible Exposure Limit (PEL):

0.01 mg/m³ (TWA), silver, metal & soluble compounds, as Ag

ACGIH Threshold Limit Value:

0.01 mg/m³ (TWA), soluble silver compounds, as Ag

0.1 mg/m³ (TWA), silver metal

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 exposure limit is exceeded, a half-face high efficiency dust/mist respirator may be worn for up to ten times the exposure limit or the maximum use concentration specified by the appropriate regulatory agency or respirator supplier, whichever is lowest. A full-face piece high efficiency dust/mist respirator may be worn up to 50 times the exposure limit, or the maximum use concentration specified by the appropriate regulatory agency or respirator supplier, whichever is lowest. For emergencies or instances where the exposure levels are not known, use a full-facepiece positive-pressure, air-supplied respirator. WARNING: Air-purifying respirators do not protect workers in oxygen-deficient atmospheres.

Skin Protection:

Wear protective gloves and clean body-covering clothing.

Eye Protection:

Use chemical safety goggles. Maintain eye wash fountain and quick-drench facilities in work area.

9. Physical and Chemical Properties

Appearance:

White, granular powder.

Odor:

Odorless.

Solubility:

Insoluble in water.

Density:

5.56

pH:

No information found.

% Volatiles by volume @ 21C (70F):

No information found.

Boiling Point:

1550C (2822F)

Melting Point:

455C (851F)

Vapor Density (Air=1):

No information found.

Vapor Pressure (mm Hg):

1 @ 912C (1674F)

Evaporation Rate (BuAc=1):

No information found.

10. Stability and Reactivity

Stability:

Stable under ordinary conditions of use and storage. Light sensitive (darkens).

Hazardous Decomposition Products:

Oxides of the contained metal and halogen, possibly also free, or ionic halogen.

Hazardous Polymerization:

Will not occur.

Incompatibilities:

Ammonia, ammonium hydroxide, alkali metals.

Conditions to Avoid:

Heat, moisture, light, and incompatibles.

11. Toxicological Information

No LD50/LC50 information found relating to normal routes of occupational exposure. Investigated as a mutagen.

-----\Cancer Lists\-----			
Ingredient	---NTP Carcinogen---		IARC Category
	Known	Anticipated	
Silver Chloride (7783-90-6)	No	No	None

12. Ecological Information

Environmental Fate:

No information found.

Environmental Toxicity:

No information found.

13. Disposal Considerations

Whatever cannot be saved for recovery or recycling should be managed in an appropriate and approved waste disposal facility. Processing, use or contamination of this product may change the waste management options. State and local disposal regulations may differ from federal disposal regulations. Dispose of container and unused contents in accordance with federal, state and local requirements.

14. Transport Information

Not regulated.

15. Regulatory Information

-----\Chemical Inventory Status - Part 1\-----				
Ingredient	TSCA	EC	Japan	Australia
Silver Chloride (7783-90-6)	Yes	Yes	Yes	Yes

-----\Chemical Inventory Status - Part 2\-----				
Ingredient	Korea	--Canada--		Phil.
		DSL	NDSL	
Silver Chloride (7783-90-6)	Yes	Yes	No	Yes

-----\Federal, State & International Regulations - Part 1\-----				
Ingredient	-SARA 302-		-----SARA 313-----	
	RQ	TPQ	List	Chemical Catg.

Silver Chloride (7783-90-6)	No	No	No	Silver compo
-----\Federal, State & International Regulations - Part 2\-----				
Ingredient	CERCLA	261.33	-RCRA-	-TSCA-
			8(d)	
Silver Chloride (7783-90-6)	No	No	No	No

Chemical Weapons Convention: No TSCA 12(b): No CDTA: No
 SARA 311/312: Acute: No Chronic: Yes Fire: No Pressure: No
 Reactivity: No (Pure / Solid)

Australian Hazchem Code: None allocated.

Poison Schedule: None allocated.

WHMIS:

This MSDS has been prepared according to the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all of the information required by the CPR.

16. Other Information

NFPA Ratings: Health: 1 Flammability: 0 Reactivity: 1

Label Hazard Warning:

As part of good industrial and personal hygiene and safety procedure, avoid all unnecessary exposure to the chemical substance and ensure prompt removal from skin, eyes and clothing.

Label Precautions:

None.

Label First Aid:

Not applicable.

Product Use:

Laboratory Reagent.

Revision Information:

No changes.

Disclaimer:

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