

SILVER REMOVER - PART B MSDS

Label Content Code = C1016

Section 1: PRODUCT AND COMPANY IDENTIFICATION

Manufacturer: AngelGilding.com
619 Clarence Ave.
Oak Park IL 60604 USA
24-hour Emergency Phone: 708-383-3340
Product Name: Silver Remover Part B – C1016

Section 2: INGREDIENT INFORMATION

Synonyms	C.A.S.	Formula:	Formula Weight:	Percent
Ammonia solution	1336-21-6	NH ₃ , aq	35.05	<2

Section 3: HAZARD IDENTIFICATION

Emergency Overview:

POISON! DANGER! CORROSIVE. MAY BE FATAL IF SWALLOWED OR INHALED. MIST AND VAPOR CAUSE BURNS TO EVERY AREA OF CONTACT.

Potential Health Effects:

Inhalation:

Vapors and mists cause irritation to the respiratory tract. Higher concentrations can cause burns, pulmonary edema and death. Brief exposure to 5000 ppm can be fatal.

Ingestion:

Toxic! May cause corrosion to the esophagus and stomach with perforation and peritonitis. Symptoms may include pain in the mouth, chest, and abdomen, with coughing, vomiting and collapse. Ingestion of as little as 3-4 mL may be fatal.

Skin Contact:

Causes irritation and burns to the skin.

Eye Contact:

Vapors cause irritation. Splashes cause severe pain, eye damage, and permanent blindness

Chronic Exposure:

Repeated exposure may cause damage to the tissues of the mucous membranes, upper respiratory tract, eyes and skin.

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Section 4: FIRST AID MEASURES

Inhalation:

Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Call a physician immediately.

Ingestion:

If swallowed, DO NOT INDUCE VOMITING. Give large quantities of water. Never give anything by mouth to an unconscious person. Get medical attention immediately.

Skin Contact:

Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Call a physician, immediately. Wash clothing before reuse.

Eye Contact:

Immediately flush eyes with gentle but large stream of water for at least 15 minutes, lifting lower and upper eyelids occasionally. Call a physician immediately. Immediate action is critical to minimize possibility of blindness.

Section 5: FIRE FIGHTING MEASURES
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Fire:

Autoignition temperature: 651C (1204F)

Flammable limits in air % by volume:

lcl: 16; ucl: 25

Explosion:

Flammable vapors may accumulate in confined spaces.

Fire Extinguishing Media:

Use any means suitable for extinguishing surrounding fire. Use water spray to blanket fire, cool fire exposed containers, and to flush non-ignited spills or vapors away from 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.

Section 6: ACCIDENTAL RELEASE MEASURES

Ventilate area of leak or spill. Keep unnecessary and unprotected people away from area of spill. Wear appropriate personal protective equipment as specified in Section 8. Contain and recover liquid when possible. Do not flush caustic residues to the sewer. Residues from spills can be diluted with water, neutralized with dilute acid such as acetic, hydrochloric or sulfuric. Absorb neutralized caustic residue on clay, vermiculite or other inert substance and package in a suitable container for disposal. US Regulations (CERCLA) require reporting spills and releases to soil, water and air in excess of reportable quantities. The toll free number for the US Coast Guard National Response Center is (800) 424-8802.

Section 7: HANDLING AND STORAGE

Keep in a tightly closed container, stored in a cool, dry, ventilated area. Protect against physical damage. Separate from incompatibilities. Store below 25C. Protect from direct sunlight. Containers of this material may be hazardous when empty since they retain product residues (vapors, liquid); observe all warnings and precautions listed for the product.

Section 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

Airborne Exposure Limits:

OSHA PEL: 50 ppm

ACGIH TLV: 25 ppm (NH₃) (TWA) 35 ppm (STEL)

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 and engineering controls are not feasible, a full facepiece respirator with an ammonia/methylamine cartridge 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 impervious protective clothing, including boots, gloves, lab coat, apron or coveralls, as appropriate, to prevent skin contact. Neoprene and nitrile rubber are recommended materials. Polyvinyl alcohol is not recommended.

Eye Protection:

Use chemical safety goggles and/or full face shield where dusting or splashing of solutions is possible. Maintain eye wash fountain and quick-drench facilities in work area.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Colorless liquid
Odor:	Ammonia
Solubility in water:	Complete
Density (g cm⁻³):	1
pH	11.6
Boiling Point: °C	100
Melting Point (°C):	0

Section 10: STABILITY AND REACTIVITY**Stability:**

Stable under ordinary conditions of use and storage.

Hazardous Decomposition Products:

Burning may produce ammonia, nitrogen oxides.

Incompatibilities:

Acids, acrolein, dimethyl sulfate, halogens, silver nitrate, propylene oxide, nitromethane, silver oxide, silver permanganate, oleum, beta-propiolactone. Most common metals.

Conditions to Avoid:

Heat, sunlight, incompatibles, sources of ignition.

Section 11: TOXICOLOGICAL INFORMATION:

Oral rat LD50:	350 mg/kg; eye, rabbit, standard Draize, 250 ug; severe
Mutagen:	Investigated
Tumorigen:	Investigated
Inhalation rat LC50	2000 ppm/4-hr

Section 12: ECOLOGICAL INFORMATION

Environmental Fate:

This material is not expected to significantly bioaccumulate.

Environmental Toxicity:

This material is expected to be very toxic to aquatic life. The LC50/96-hour values for fish are less than 1 mg/l. The EC50/48-hour values for daphnia are less than 1 mg/l.

Section 13: DISPOSAL CONSIDERATIONS:

Whatever cannot be saved for recovery or recycling should be managed in an appropriate and approved waste facility. Although not a listed RCRA hazardous waste, this material may exhibit one or more characteristics of a hazardous waste and require appropriate analysis to determine specific disposal requirements. 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.

Section 14: TRANSPORT INFORMATION:

Not DOT regulated.

Section 13: REGULATORY INFORMATION:

TSCA:	EC:	Japan:	Australia:	Korea:	Canada
Y	Y	Y	Y	Y	Y

Known to the State of California to cause cancer (Y/N): N

Section 14: OTHER INFORMATION

Health:	NFPA Ratings: Flammability:	Reactivity:
3	1	0

Label Hazard Warning: POISON! DANGER! CORROSIVE. MAY BE FATAL IF SWALLOWED OR INHALED. MIST AND VAPOR CAUSE BURNS TO EVERY AREA OF CONTACT.

Label Do not get in eyes, on skin, or on clothing.
Precautions: Do not breathe vapor or mist.
Keep container closed.
Use only with adequate ventilation.
Wash thoroughly after handling.

Label First Aid: If swallowed, DO NOT INDUCE VOMITING. Give large quantities of water. Never give anything by mouth to an unconscious person. If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. In case of contact, immediately flush eyes or skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. IMMEDIATE ACTION IS ESSENTIAL FOR EYE EXPOSURES. In all cases call a physician immediately.

Product Use: Commercial mirroring

Data prepared by: M. G. King
Data prepared for: Sarah King – Stained Glass Ltd. d/b/a AngelGilding.com
Telephone: 708-383-3340
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