
CONNOISSEURS[®]

MATERIAL SAFETY DATA SHEETS

For

SILVER JEWELRY CLEANER - liquid dip

Models #:

135, 700, 1017, 1020, 1046

MATERIAL SAFETY DATA SHEET

Connoisseurs Products urges each customer or recipient of this MSDS to study it carefully to become aware of and understand the hazards associated with the product. The reader should consider consulting reference works or individuals who are experts in ventilation, toxicology, and fire prevention, as necessary or appropriate to use and understand the data contained in this MSDS.

To promote safe handling, each customer or recipient should: (i) notify its employees, agents, contractors and others whom it knows or believes will use this material of the information in this MSDS and any other information regarding hazards or safety; (ii) furnish this same information to each of its customers for the product; and (iii) request its customers to notify their employees, customers, and other users of the product of this information.

EFFECTIVE DATE: September 1, 2005

OBSOLETE DATE:

I. IDENTIFICATION

PRODUCT NAME: Connoisseurs and Jewelite Silver Jewelry Cleaner;
Model #: 700, 1017, 1020, 135, 1046

CHEMICAL NAME: Cleaning Solution Mixture

CHEMICAL FAMILY:

FORMULA:

MOLECULAR WEIGHT:

SYNONYMS:

CAS #: Various
CAS NAME: Various

II. PHYSICAL DATA (determined on typical material)

BOILING POINT: N.D.

FREEZING POINT: N.D.

SPECIFIC GRAVITY (H2O = 1): Sg = 1.09

VAPOR PRESSURE AT 20 ° C: > water

VAPOR DENSITY (air = 1): N.D.

SOLUBILITY IN WATER by wt: Complete

EVAPORATION RATE (Butyl Acetate = 1): Unk

APPEARANCE AND ODOR: Clear with strong fragrance odor.

NFPA RATING: Health-3, Flammability-1, Reactivity-2, Specific Hazard-N/A

III. INGREDIENTS

<u>MATERIAL</u>	<u>CAS #</u>	<u>%</u>	<u>OSHA PEL</u>	<u>ACGIH TLV (units)</u>	<u>HAZARD</u>
Sulfuric Acid	7664-93-9	2%	1 mg/m ³	1 mg/m ³	See Section V
Thiourea	62-56-6	7%	NE	NE	See Section V

IV. FIRE AND EXPLOSION HAZARD DATA

FLASH POINT: N.D.

FLAMMABLE LIMITS IN AIR (% by volume): N.D. **LOWER: N.D** **UPPER: N.D.**

EXTINGUISHING MEDIA: According to NFPA guide, use water spray, dry chemical foam or carbon dioxide. Water or foam may cause frothing. Use water to cool fire exposed container.

SPECIAL FIRE FIGHTING PROCEDURES:

Do not direct a solid stream of water or foam into hot, burning pools. This may cause frothing and increase fire intensity. Use protective clothing, eye protection, and self-contained breathing apparatus. Use remote spray monitors or fight fire from behind shields. Emits highly toxic fumes under fire conditions.

UNUSUAL FIRE AND EXPLOSION HAZARDS:

Highly reactive; capable of igniting finely divided combustible materials on contact. Reacts violently with organic materials with evolution of heat. Extremely hazardous in contact with many materials particularly Carbides, Chlorates, Fulminates, Nitrates, Picrates, Powdered Metals, releasing Hydrogen. Hydrogen Gas can accumulate to explosive concentration inside steel tanks.

V. HEALTH HAZARD DATA

EXPOSURE LIMIT(S): See Section III

EFFECTS OF SINGLE OVER-EXPOSURE:

SWALLOWING:

A single dose oral is highly toxic. May cause severe pain, ulceration and scarring of the digestive tract. Thiourea is toxic to humans; TDLo₁₆₆₀ mg/kg, blood (hemorrhage, granulocytopenia, changes in cell count).

SKIN ABSORPTION AND SKIN CONTACT:

Corrosive to the skin. May cause severe burns. Prolonged or repeated exposure and skin contact to solutions may cause irritation and dermatitis, and toxic levels of absorption.

INHALATION:

Causes severe irritation of the respiratory tract and may cause increased pulmonary resistance, transient cough and broncho-constriction. Severe over-exposure may result in lung collapse and pulmonary edema, which can be fatal. Prolonged or repeated exposure may result in impaired lung function or discoloration and erosion of teeth.

EYE CONTACT:

Contact with eyes will result in severe damage causing burns or blindness.

EFFECTS OF REPEATED OVER-EXPOSURE:**Cancer:**

This mixture contains known carcinogens. Thiourea is listed in the NTP, IARC, and OSHA lists as a known carcinogen. Thiourea can cause depression of bone marrow with anemia, leukopenia, thrombocytopenia, agranulocytosis, allergic skin eruptions, and thyroid enlargement.

Reproductive Effects:

Based on animal studies of thiourea in cats, TDLo240 mg/kg, birth defects can occur.

Effects on Genetic Material:

Based on animal studies of thiourea, genic mutation is possible with low levels of exposure.

MEDICAL CONDITIONS AGGRAVATED BY OVER-EXPOSURE:

Medical conditions that may be aggravated by exposure include asthma, anemia, bronchitis, emphysema and other lung diseases and chronic nose, sinus or throat conditions. In the event of skin or eye contact, rapid and thorough flushing is essential.

OTHER EFFECTS OF OVER-EXPOSURE:

EMERGENCY AND FIRST AID PROCEDURES:

SWALLOWING:	If conscious give 1-2 glasses of milk or water. DO NOT induce vomiting. Obtain medical attention.
SKIN:	Remove contaminated clothing. Flush affected areas with running water for at least 20 minutes. Obtain medical attention.
INHALATION:	Remove to fresh air. If not breathing, give artificial respiration. Keep warm and at rest. Obtain medical attention.
EYES:	Flush eyes with running water for at least 30 minutes holding eyelids open. Obtain medical attention immediately.

NOTES TO PHYSICIAN:

Eye irrigation may be necessary for an extended period of time to remove as much acid as possible. Duration of irrigation and treatment is at the discretion of medical personnel. May cause tissue destruction leading to stricture. If lavage is performed, suggest endotracheal and/or esophagoscopy control. If burn is present, treat as any thermal burn, after decontamination. No specific antidote. Supportive care. Treatment based on judgment of the physician in response to reactions of the patient.

VI. REACTIVITY DATA

STABILITY: Stable

CONDITIONS TO AVOID: Excessive heat. Will release sulfur compounds when heated.

INCOMPATIBILITY (materials to avoid):

Contact of acid with organic materials (such as Chlorates, Carbides, Fulminates and Picrates) may cause fire and explosions. Contact with metals may form toxic Sulfur Dioxide Gas, Hydrogen Sulfide, and flammable Hydrogen Gas.

HAZARDOUS COMBUSTION OR DECOMPOSITION PRODUCTS:

Toxic gases and vapors (e.g., Sulfur Dioxide, Sulfuric Acid vapors, Hydrogen Sulfide, Sulfur Trioxide) may be released when Sulfuric Acid and Thiourea decomposes.

HAZARDOUS POLYMERIZATION: Will not occur

VII. SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED:

Remove all ignition sources. Ventilate area. Stop and contain leak or spill. Dike with inert material (sand, earth, etc.). Collect into containers for reclaim or disposal. Harmful to aquatic life in very low concentrations. May be dangerous if it enters water intake; fish toxicity critical concentration <10 mg/l; 7.34 mg/l/48 hrs. - Lymnaea Palustris 0-100% mortality.

DEACTIVATING CHEMICALS:

Lime, Limestone, Sodium Carbonate (Soda Ash), Sodium Bicarbonate, Dilute Sodium Hydroxide, Dilute Aqua Ammonia to neutralize acid. Thiourea component is still toxic.

WASTE DISPOSAL METHOD:

Consult Federal, State, and Local regulations on chemical waste disposal. Must store waste in plastic containers. Do not dump into any sewer, on the ground, or into any body of water. For unused or uncontaminated material, the preferred management options are to send to a licensed recycler, reclaimer, or incinerator. The same management options are recommended for used or contaminated material, although additional evaluation is required (see, for example, 40 CFR Part 261 "Identification and Listing of Hazardous Waste"). Any disposal practice must be in compliance with Federal, State, Provincial, and Local Laws and regulations. Check with appropriate agencies for your location. For additional information see Section VI (Reactivity Data) and "Regulatory Information".

Protective Gear is Required: See Section VIII

VIII. SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION:

Atmospheric levels should be maintained below the exposure guideline. When respiratory protection is required for certain operations, use a self-contained breathing apparatus.

VENTILATION:

Control airborne concentrations below the exposure guideline. Good general ventilation should be sufficient for most conditions.

PROTECTIVE GLOVES:

Use impervious gloves.

EYE PROTECTION:

Chemical type goggles and face shield.

OTHER PROTECTIVE EQUIPMENT:

Eye bath, safety shower, and full protective clothing.

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE:

Corrosive and poisonous. This product, in the presence of aluminum, zinc, magnesium, and similar metals produces hydrogen. Protect from excessive heat. Store in a dry, well ventilated location away from combustibles, oxidizers, bases, or metallic powders. Keep away from ignition sources. Sulfuric Acid will attack some forms of plastics and coatings. Always add acid to water, not water to acid. If kept in upper floors of building, floors should be acid proof with drains to a recovery tank.

X. REGULATORY INFORMATION

STATUS ON SUBSTANCE LISTS:

The concentrations shown are maximum or ceiling levels (weight %) to be used for calculations for regulations. Trade Secrets are indicated by "TS".

FEDERAL EPA

Comprehensive Environmental Response Compensation, and Liability Act of 1980 (CERCLA) requires notification of the National Response Center of release of quantities of Hazardous Substances equal to or greater than the reportable quantities (RQ's) in 40 CFR 302.4.

Components present in this product at a level which could require reporting under the statute are:

<u>Chemical</u>	<u>CAS #</u>	<u>Upper Bound Concentration %</u>
Sulfuric Acid	7664-93-9	2%
Thiourea	62-56-6	7%

SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT OF 1986 (SARA) TITLE III

Requires emergency planning based on Threshold Planning Quantities (TPQs) and release reporting based on Reportable Quantities (RQs) in 40 CFR 355 (used for SARA 302, 304, 311 and 312). Components present in this product at a level which could require reporting under the statute are:

<u>Chemical</u>	<u>CAS #</u>	<u>Upper Bound Concentration %</u>
Sulfuric Acid	7664-93-9	2%
Thiourea	62-56-6	7%

Section 311/312 Status - An immediate health hazard; a delayed health hazard.

SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT OF 1986 (SARA) TITLE III:

Requires submission of annual reports of release of toxic chemicals that appear in 40 CFR 372 (for SARA 313). This information must be included in all MSDS's that are copied and distributed for this material.

Components present in this product at a level which could require reporting under the statute are:

<u>Chemical</u>	<u>CAS #</u>	<u>Upper Bound Concentration %</u>
Sulfuric Acid	7664-93-9	2%
Thiourea	62-56-6	7%

STATE RIGHT-TO-KNOW**CALIFORNIA PROPOSITION 65:**

This product contains Thiourea which the State of California has found to cause cancer, birth defects or other reproductive harm.

MASSACHUSETTS:

Right-to-Know, Substance List (MSL) Hazardous Substances and Extraordinarily Hazardous Substances on the MSL must be identified when present in products. Components present in this product at a level which could require reporting under the statute are:

Extraordinarily Hazardous Substances (=> 0.0001%)

<u>Chemical</u>	<u>CAS #</u>	<u>Upper Bound Concentration %</u>
Sulfuric Acid	7664-93-9	2%
Thiourea	62-56-6	7%

PENNSYLVANIA:

Right-to Know, Hazardous Substance List Hazardous Substances and Special hazardous Substances on the List must be identified when present in product.

Components present in this product at a level which could require reporting under the statute are: Unknown

TOXIC SUBSTANCES CONTROL ACT (TSCA) STATUS: The ingredients of this product are on the TSCA inventory.

CALIFORNIA SCAQMD RULE 443.1 VOC'S:

Not presently available

OTHER REGULATORY INFORMATION:**NOTES:**

XI. TRANSPORTATION

PROPER SHIP NAME: Consumer Commodity ORM-D (if applicable), otherwise - Corrosive Liquid, NOS, Ltd Qty, UN 1760, Hazard Class 8, PG III (Sulfuric Acid) (Thiourea), RQ Thiourea

HAZARD CLASS: ORM-D (Consumer Commodity) if applicable; PACKING GROUP: III
otherwise, Corrosive Liquid, Nos, Ltd Qty, RQ Thiourea

UN/NA #: UN-1760 **SPECIAL PROVISIONS:**

HAZARD NAME: Sulfuric Acid, Thiourea

LABEL PLACARD: ORM-D (if exempt U.S. 48 ground), otherwise, Corrosive Liquid, Ltd Qty, Hazard Class 8, Packing Group III

EPA RQ: Thiourea **POUND** 10 **KILOS:** 4.54

EMERGENCY RESPONSE GUIDE #59 **CARGO CLASS:** IMCO: Hazard Class 8, PG III

MESSAGES:

FREIGHT CLASS: Cleaning compound, NOI (Sulfuric Acid) (Thiourea) (not flammable)

LTL-55

TL-35

TITLE III INFORMATION:

TPQ

POUNDS:

KILOS:

GENERIC CLASS:

NOTE: Gallons and Drums CANNOT be shipped by air.

XII. MANUFACTURER'S STATEMENT

No representation is made as to the accuracy of the information herein.

CAUTION: Misuse of empty containers can be hazardous. Empty containers can be hazardous if used to store toxic, flammable, or reactive materials. Cutting or welding of empty containers might cause fire, explosion, or toxic fumes from residues. Do not pressurize or expose to open flame or heat. Keep container closed and drum bungs in place.

To determine applicability or effect of any law or regulation with respect to the product, users should consult his legal advisor or appropriate government agency. Connoisseurs does not undertake to furnish advise on such matters.

The information contained herein is believed to be accurate. It is provided independently of any sale of the product as part of Connoisseurs' Product Safety Program. It is not intended to constitute performance information concerning the product. No expense warranty, or implied warranty of merchantability or fitness for a particular purpose is made with respect to the product or the information contained herein. You are urged to obtain data sheets for all products you buy, process, use or distribute and you are encouraged and requested to advise those who may come in contact with such products of the information contained herein.

Connoisseurs Products Corp. urges the customer receiving this Material Safety Data Sheet to study it carefully to become aware of hazards, if any, of the product involved. In the interest of safety you should: (i) notify your employees, agents, and contractors of the information on this sheet; (ii) furnish a copy to each of your customers for the product; and (iii) request your customers to inform their employees and customers as well.

The opinions expressed herein are those of Connoisseurs Products Corp. We believe that the information contained herein is current as of the date of this Material Safety Data Sheet. Since the use of this information and these opinions and the conditions of use of the product are not within the control of Connoisseurs Products Corp., it is the user's obligation to determine the conditions of safe use of the product.

The information herein is given in good faith, but no warranty, express or implied, is made. This document is prepared, pursuant to the OSHA Hazard Communication Standard (29 CFR 1910.1200). In addition, other substances not "Hazardous" per this OSHA Standard may be listed. Where proprietary ingredient shows, the identity may be made available as provided in this Standard.

Substance listed in the Ingredients Section are those identified as being present at a concentration of 1% or greater, or 0.1% if the substance is on the list of potential carcinogens cited in OSHA Hazard Communication Standard. Where proprietary ingredient shows, the identity of this substance may be made available as provided in 29 CFR 1910.1200 (1).