

BACHARACH, INC.
MATERIAL SAFETY DATA SHEET

This Material Safety Data Sheet has been prepared to comply with the EC Directive, Canadian WHMIS and OSHA Hazard Communication Regulations.

**SECTION 1: IDENTIFICATION OF THE SUBSTANCE/PREPARATION
AND THE COMPANY/UNDERTAKING**

Bacharach, Inc.
621 Hunt Valley Circle
New Kensington, PA 15068

Emergency Phone: (800) 424-9300 (Chemtrec)
Information Phone: (724) 334-5760
Fax: (724) 334-5763

Product Name: Mercury Standard

Product Number: 4050-0120

MSDS Number: 4099-1461

Revision Number: 8

MSDS Date of Preparation/Revision: 03/10/06

SECTION 2: COMPOSITION/ INFORMATION INGREDIENTS

Chemical Name	CAS# / EINECS#	%	EU Classification (67/548/EEC)
Mercuric Chloride	7487-94-7 / 231-299-8	0.1	T+, C, N R28, R34, R48/24/25, R50/53
Nitric Acid	7697-37-2 / 231-714-2	3.0	O, C R8, R35
Water	7732-18-5	96.9	Not Applicable

See Section 16 for further information on EU Classification.

SECTION 3: HAZARDS IDENTIFICATION

Colorless liquid with no odor.

Emergency Overview: May cause burns to the eyes and skin. Prolonged absorption may result in mercury poisoning.

EU Preparation Classification (1999/45/EC): Harmful (Xn) Irritant (Xi) R22, R36/38

SECTION 4: FIRST AID

Eye Contact: Flush thoroughly with copious amounts of running water for 20 minutes, lifting the lids occasionally. Get immediate medical attention.

Skin Contact: Flush thoroughly with water for 20 minutes. Remove contaminated clothing and launder before re-use. Get medical attention if irritation develops.

Inhalation: Remove victim to fresh air and give artificial respiration if needed. Get immediate medical attention.

Ingestion: Never give anything by mouth to an unconscious or convulsing person. Immediately give the victim 1 to 2 glasses of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get immediate medical attention.

SECTION 5: FIRE AND EXPLOSION HAZARD DATA

Extinguishing Media: This material is not combustible. Use any media that is appropriate for the surrounding fire.

Special Fire Fighting Procedures: Firefighters should wear NIOSH approved positive pressure self contained breathing apparatus and full protective clothing. Use water to keep exposed containers cool.

Unusual Fire and Explosion Hazards: None known.

Hazardous Combustion Products: Oxides of nitrogen, hydrogen nitrate, halogens and mercury.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Wear suitable protective equipment (See Section 8). Dike and contain with inert absorbent. Neutralize with soda ash and absorb. Place in suitable container. Wash residue with water. Prevent from entering sewers or waterways.

SECTION 7: HANDLING AND STORAGE

Work Practices: Do not breathe mists. Prevent contact with the eyes, skin & clothing. Wear recommended protective clothing. Wash thoroughly after handling. Do not eat, drink or smoke in the work area. Keep containers tightly closed when not in use.

Special Precautions: Corrosive and toxic! Empty containers retain residues and may be hazardous-follow all precautions when handling.

Storage: Store in a cool, well ventilated area, away from bases and other incompatible materials. Keep container tightly closed.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Chemical Name	Exposure Limits
Mercuric Chloride (as Mercury)	0.1 mg/m ³ Ceiling OSHA PEL 0.025 mg/m ³ TWA (skin) ACGIH TLV 0.1mg/m ³ TWA DFG-MAK
Nitric Acid	2 ppm TWA OSHA PEL 2 ppm TWA, 4 ppm STEL ACGIH TLV 2 ppm TWA DFG-MAK 2 ppm TWA, 4 ppm STEL UK WEL
Water	None Established

Ventilation: Use general or local exhaust ventilation as needed to maintain concentrations below the TLV.

Respiratory Protection: If exposure limits are exceeded, use a NIOSH approved dust/mist/acid gas respirator. For higher concentrations (greater than 10 times the TLV) a supplied air or self-contained respirator may be required. Respirator selection and use should be based on contaminant type, form and concentration. Follow OSHA 1910.134, ANSI Z88.2 and good Industrial Hygiene practice.

Gloves: Impervious such as rubber or neoprene.

Eye Protection: Chemical safety goggles and/or face shield recommended. Do not wear contact lenses.

Other Protective Equipment: Protective apron or lab coat. Safety shower and eye wash in the work area.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance and Odor: Colorless liquid with no odor.

pH: <1

Vapor Density: Not determined

Specific Gravity: Approximately. 1.0

Vapor Pressure: 0.7 (water)

Melting Point: Not Available
Solubility In Water: Complete
Vapor Density: Not Available
Flash Point: N/A
Autoignition Temperature: N/A

Boiling Point: Not Available
Percent Volatile: 96.9%
Octanol/Water Coefficient: Not determined
Method: N/A
Flammable Limits: LEL: N/A **UEL:** N/A

SECTION 10: STABILITY AND REACTIVITY

Stability: Stable

Conditions to Avoid: Avoid excessive heat. Mercuric chloride may slowly decompose to metallic mercury in the presence of an organic material and sunlight.

Incompatibility: Combustible materials, metals and metallic powders, hydrogen sulfide, carbides, alcohols, sulfites, phosphates, ammonia, carbonates, alkalies and bromides.

Hazardous Decomposition Products: Oxides of nitrogen, hydrogen nitrate, halogens and mercury.

Hazardous Polymerization: Will not occur.

SECTION 11: TOXICOLOGICAL INFORMATION

Potential Health Effects:

Eye Contact: May cause severe irritation or chemical burns with possible permanent damage.

Skin Contact: May cause irritation or burns. Mercury compounds are absorbed through the skin.

Inhalation: May cause irritation of the nose, throat and respiratory tract. High concentrations may produce pulmonary edema.

Ingestion: May cause gastrointestinal irritation or corrosion with vomiting, severe pain, perforation of the esophagus or stomach, shock and death possible.

Chronic Health Effects: Prolonged absorption of mercury compounds may cause mercury poisoning with symptoms of tremors, salivation, inflammation of the mouth, loosening of the teeth, weight loss, hallucinations, peripheral neuropathy and kidney damage. Mercury is reported to cause adverse reproductive effects in lab animals.

Carcinogen Status: None of the components are listed as a carcinogen or suspect carcinogen by IARC, NTP, OSHA or the EU Directives.

Medical Conditions Aggravated by Exposure: Individuals with pre-existing skin diseases may be at increased risk from exposure.

Acute Toxicity Data: Mercuric Chloride: LD50 oral rat: 1 mg/kg.
LD50 dermal rat: 41 mg/kg
Nitric Acid: LC50 inhalation rat: 244 ppm/30 min.

Irritancy Data: This material is severely irritating or corrosive to all tissues.

Sensitization: This material is not known to cause sensitization in animals or humans.

Reproductive Toxicity: Mercury compounds and nitric acid have been reported to cause reproductive toxicity in laboratory animals.

Teratogenicity: Mercury compounds have been reported to cause teratogenic effects in laboratory animals.

Mutagenicity: Mercuric chloride has been found to be mutagenic in some test systems.

Synergistic Effects: There are no chemicals known to cause any additive adverse health effects.

SECTION 12: ECOLOGICAL INFORMATION

The ecological effects of this product have not been evaluated. Mercuric chloride is classified as very toxic to aquatic organisms with possible long-term effects.

SECTION 13: DISPOSAL

Dispose in accordance with all local, state and federal regulations.

RCRA Hazardous Waste Codes: D002, D009

SECTION 14: TRANSPORTATION DATA

DOT Shipping Name: Nitric Acid Mixture, (Nitric Acid 3%)

DOT Hazard Class: 8, PG II

UN Number: UN2031

DOT Labels Required (49CFR172.101): Corrosive

Hazardous Substance (49CFR172.101): Mercury

Reportable Quantity: 1,000 lbs.

Emergency Response Guide Number: 157

IATA Shipping Name: Nitric Acid Mixture, (Nitric Acid 3%)

IATA Hazard Class: 8, PG II

UN Number: UN2031

IATA Hazard Labels Required: Corrosive (Cargo Aircraft 1-30 Liters)

SECTION 15: OTHER REGULATORY INFORMATION

U.S. FEDERAL REGULATIONS:

SARA 311/312: Hazard Categories for SARA Section 311/312 Reporting: Acute health, chronic health.

SARA 313: This product contains the following chemicals subject to Annual Release Reporting Requirements under SARA Section 313 (40 CFR 372):

Nitric acid	3%
Mercuric chloride	0.1%

CERCLA Section 103 Reportable Quantity: 1,000 lbs (Mercury Compounds - 1 lb)

US Toxic Substances Control Act: All of the components of this product are listed on the EPA TSCA Inventory.

STATE REGULATIONS:


California Proposition 65: This product contains the following substances known to the State of California to cause developmental toxicity (birth defects): Mercury compound (mercuric chloride - 0.1%).

INTERNATIONAL REGULATIONS:

Australian Inventory Of Chemical Substances: All of the components in this product are listed on the AICS Inventory.


Canadian Environmental Protection Act: All of the components of this product are listed on the Canadian Domestic Substances List.

Canadian WHMIS Classification:

	Class D - Division 2A (Very Toxic Material Causing Other Toxic Effects) Class E - Corrosive Material.
---	--

European Inventory of Commercial Chemical Substances: All of the components of this product are listed on the EINECS Inventory.

European Community Labeling: Contains Mercury Dichloride

	R22 Harmful if swallowed. R36/38 Irritating to eyes and skin. S24/25 Avoid contact with skin and eyes. S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. S60 This material and/or its container must be disposed of as hazardous waste.
---	---

Japan MITI: All of the components of this product are existing chemical substances as defined in the Chemical Substance Control Law.

Korean Existing Chemical List: All of the components of this product are listed on the KECL Inventory.

Philippines Inventory of Chemicals and Chemical Substances: All of the components in this product are listed on the PICCS Inventory.

SECTION 16: OTHER INFORMATION

NFPA Hazard Rating: HEALTH: 3 FIRE: 0 REACTIVITY: 0

EU Classes and Risk Phrases for Reference (See Sections 2 and 3):

- T+ Very Toxic
- N Dangerous for the Environment
- O Oxidizer
- C Corrosive
- Xn Harmful
- R8 Contact with combustible material may cause fire.
- R22 Harmful if swallowed.
- R28 Very toxic if swallowed.
- R34 Causes burns.
- R35 Causes severe burns.
- R48/24/25 Toxic: danger of serious damage to health by prolonged exposure in contact with skin and if swallowed
- R50/53 Very toxic to aquatic organisms, may cause long term adverse effects in the aquatic environment.

Date of Previous MSDS Revision: 07/16/03

Revision Summary: Revised Section 2, 3, 4, 6, 8, 9, 11, 12, 15

BACHARACH, INC.

Mercury Standard

MSDS NO: 4099-1461

The preceding information is believed to be correct and current as of the date of preparation of this Material Safety Data Sheet. Since the use of this information and the conditions of use of the product are not within the control of Bacharach, Inc., it is the users obligation to assure safe use of this product.