

51101



Curtin Matheson Scientific, Inc.  
822 SOUTH 333RD STREET  
FEDERAL WAY, WA 98003-6343  
FISONS

# MATERIAL SAFETY DATA SHEET

MAIL TO: BIDDLE & CROWTHER  
ABCO DEALERS INC  
910 N 137TH  
SEATTLE, WA 98133

## SECTION 1 - NAME AND PRODUCT

MANUFACTURER NAME AND ADDRESS  
ERTCO  
BIMETALLIC THERMO  
401 PARK AVE SOUTH  
NEW YORK NY 10016  
EMERGENCY PHONE 201-337-3183

CHEMICAL NUMBER:  
ITEM NUMBER: 0263618  
VNDR CATLG NBR: 50FW-3  
ENTRY DATE: 10-30-91  
CHANGE DATE: 10-30-91  
PD NUMBER: 103586

COMMON NAME (ON LABEL)  
MERCURY (VARIOUS GRADES)

CHEMICAL FAMILY  
NOT GIVEN

TRADE NAME & SYNONYMS  
MERCURY (VARIOUS GRADES)  
METALLIC MERCURY  
QUICKSILVER  
LIQUID SILVER: HYDRARGYRUM

CHEMICAL FORMULA  
HG

## SECTION 2 - HAZARDOUS INGREDIENTS

HAZARDOUS COMPONENT	CAS	% (WT)	TLV	PEL
MERCURY (VARIOUS GRADES)	7439-97-6	.00	.050 MG/M3	.050 MG/M3

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PEL: Permissible Exposure Limit established by the Occupational Safety and Health Administration (OSHA).  
TLV: Threshold Limit Value established by the American Conference of Governmental Industrial Hygienists, 1986-87.

OTHER INGREDIENT INFORMATION  
MERCURY (VARIOUS GRADES); METALLIC MERCURY; QUICKSILVER; LIQUID SILVER;  
HYDRARGYRUM

## SECTION 3 - PHYSICAL DATA

BOILING POINT 357 DEG. C	VOLATILE BY VOLUME (%) NOT GIVEN	VAPOR PRESSURE 20C/.0012-100C/.273
MELTING POINT -38.87 DEG. C	VAPOR DENSITY 1.015	SOLUBILITY IN WATER 0.002GMS/100GMS @20C
EVAPORATION RATE ( BUAC = 1) N/A=SEE PHYSICAL DATA	SPECIFIC GRAVITY 13.5	
APPEARANCE AND ODOR SILVERY LIQUID MOBILE AND ODORLESS		
OTHER PHYSICAL DATA EVAPORATION RATE: DEPENDS ON TEMPERATURE AND PRESSURE. FLAMMABLE LIMITS: N/A		

## SECTION 4 - FIRE AND EXPLOSION DATA

## FLASH POINT

N/A

## LOWER EXPLOSIVE LIMIT

N/A

## UPPER EXPLOSIVE LIMIT

N/A

## EXTINGUISHING MEDIA

USE EXTINGUISHING MEDIA APPROPRIATE FOR SURROUNDING FIRE.

## UNUSUAL FIRE AND EXPLOSION HAZARDS

MERCURY IS NOT FLAMMABLE OR EXPLOSIVE.

## SPECIAL FIRE FIGHTING PROCEDURES

AT HIGH TEMPERATURE MERCURY VAPORIZES RAPIDLY TO FORM HIGHLY TOXIC FUMES THAT ARE ODORLESS AND COLORLESS. FIREFIGHTERS SHOULD WEAR PROPER PROTECTIVE EQUIPMENT AND SELF CONTAINED BREATHING APPARATUS WITH FULL FACEPIECE OPERATED IN POSITIVE PRESSURE MODE WHEN MERCURY IS INVOLVED IN A FIRE.

## SECTION 5 - HEALTH HAZARD DATA

## HEALTH HAZARDS (ACUTE &amp; CHRONIC)

ACUTE: INHALATION OF HIGH LEVELS OF MERCURY VAPOR CAN LEAD TO SEVERE RESPIRATORY IRRITATION, CHEST PAINS AND BREATHING DIFFICULTIES WHICH MAY BE FATAL IF THE RESPIRATORY IRRITATIONS IS SEVERE. DAMAGE TO THE CENTRAL NERVOUS SYSTEM, KIDNEYS AND LIVER CAN OCCUR. CHRONIC: EXPOSURE TO LOW LEVELS OF MERCURY VAPOR MAY RESULT IN GUM AND MOUTH INFLAMMATION, IRRITABILITY, TREMORS AND STOMATITIS. CHRONIC EFFECTS OF OVEREXPOSURE CAN RESULT IN DAMAGE TO THE KIDNEYS, LIVER AND CENTRAL NERVOUS SYSTEM.

## PRIMARY ROUTES OF EXPOSURE

INHALATION, INGESTION, SKIN.

## SIGNS AND SYMPTOMS OF EXPOSURE

NERVOUS IRRITABILITY, WEAKNESS, TREMORS, GINGIVITIS, EXCESSIVE SALIVATION, LOOSENING OF TEETH, DEPRESSION, PERSONALITY CHANGES, NERVOUSNESS.

**SECTION 5 - HEALTH HAZARD DATA (CONTINUED)**

**MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE**  
 PEOPLE WITH LIVER, KIDNEY, AND NERVOUS SYSTEM DISORDERS SHOULD AVOID EXPOSURE.

**CARCINOGENICITY**

HAS NOT BEEN SHOWN TO CAUSE CANCER.

NTP <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	IARC <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	OSHA <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
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**EMERGENCY AND FIRST AID PROCEDURES**

EYES: OCCASIONAL ACCIDENTAL CONTACT WITH EYES IS USUALLY HARMLESS IF WASHED OUT IMMEDIATELY. HOLD UPPER AND LOWER EYELIDS OPEN, WASH EYE THOROUGHLY WITH PLENTY OF WATER FOR 15 MINUTES. CONSULT A PHYSICIAN. SKIN: WASH EXPOSED AREA THOROUGHLY WITH SOAP AND WATER. INHALATION: REMOVE PERSON FROM SOURCE OF EXPOSURE TO FRESH AIR. IF NOT BREATHING GIVE ARTIFICIAL RESPIRATION. IF BREATHING IS DIFFICULT, GIVE OXYGEN. CONSULT A PHYSICIAN. INGESTION: ACCIDENTAL SWALLOWING OR INGESTION OF MERCURY IS USUALLY HARMLESS. DO NOT INDUCE VOMITING. CONSULT A PHYSICIAN.

**THRESHOLD LIMITS / TOXICITY DATA**

OSHA PEL: 0.05 MG/M3. ACGIH TLV: 0.05 MG/M3.

**SECTION 6 - REACTIVITY DATA**

**STABILITY**      Unstable  Stable   
**CONDITIONS TO AVOID**  
 HEAT AND HIGH TEMPERATURES.

**INCOMPATIBILITY (MATERIALS TO AVOID)**

HALOGENS, NITRIC ACID, AMMONIA GAS, ACETYLENE AND ACETYLENE PRODUCTS.

SECTION 6 - REACTIVITY DATA (CONTINUED)

HAZARDOUS DECOMPOSITION OR BYPRODUCTS  
MERCURY VAPORS.

HAZARDOUS POLYMERIZATION May Occur  Will Not Occur   
CONDITIONS TO AVOID  
N/A

SECTION 7 - SPILL, LEAK, AND DISPOSAL PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED  
USE APPROPRIATE RESPIRATORY PROTECTION AND PROPER PROTECTIVE CLOTHING. CLEAN UP  
SPILL IMMEDIATELY WITH A MERCURY VACUUM CLEANER OR OTHER SUITABLE MEANS.  
DECONTAMINATE AREA WITH A MERCURY DECONTAMINATE. KEEP COLLECTED MERCURY FOR  
DISPOSAL.

WASTE DISPOSAL METHOD  
DISPOSE IN ACCORDANCE WITH ALL FEDERAL, STATE AND LOCAL ENVIRONMENTAL  
REGULATIONS.

SECTION 8 - SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION  
RESPIRATOR FOR PROTECTION AGAINST MERCURY VAPOR IS NEEDED IF THE PEL IS EXCEEDED.

LOCAL VENTILATION  
USE GENERAL OR LOCAL EXHAUST VENTILATION TO MEET PEL REGULATIONS.

MECHANICAL VENTILATION  
N/A

SPECIAL VENTILATION  
N/A

**SECTION 8 - SPECIAL PROTECTION INFORMATION (CONTINUED)**

**OTHER VENTILATION**  
N/A

**PROTECTIVE GLOVES**

IMPERVIOUS GLOVES

**EYE PROTECTION**

GOGGLES TO PROTECT AGAINST SPLASHING MERCURY.

**OTHER PROTECTIVE CLOTHING OR EQUIPMENT**

IMPERVIOUS CLOTHING RECOMMENDED. CLOTHING SHOULD BE REMOVED AT END OF WORK DAY AND WASHED FREQUENTLY.

**SECTION 9 - SPECIAL PRECAUTIONS**

**PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE**

KEEP CONTAINERS TIGHTLY CLOSED AND STORE IN A COOL DRY AREA AWAY FROM FIRE HAZARD. NO SMOKING OR EATING IN WORK AREA. SHOWER OR BATHE EVERY DAY.

**SECTION 10 - OTHER INFORMATION**

**MISCELLANEOUS INFO.**

N/A = NOT APPLICABLE. N/A = NOT AVAILABLE.

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