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IMPORTANT SAFETY INFORMATION --Ö NOT DISCARD.

PLEASE ROUTE TO COMPANY SAFETY OFFICER.

FISHER

SYRACUSE CITY SCHOOL DISTRICT 725 HARRISON ST SYRACUSE NY 13210

FOR EACH CHEMICAL SENT ONLY ON THE SUBSTANTIAL REVIS

MATERIAL SAFETY DATA SHEETS (MSDS) NOT IN THIS MAILING WILL FOLLOW UNDER SEP-

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ARATE COVER.

THIS PACKET MAY CONTAIN MSDS FOR PRODUCTS MANUFACTURED BY OTHERS AND DISTRIBUTED BY FISHER
SCIENTIFIC COMPANY. THESE MSDS WERE PREPARED
BY THE MANUFACTURER AND FISHER DISCLAIMS ALL

ND/OR ADDRESS GED, CONTACT ER SALES

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MERCURY MERCURY MERCURY

# MATERIAL SAFETY DATA SHEET

SHER SCIENTIFIC

EMERGENCY CONTACTS GASTON L. PILLORI (201) 796-7100

08/16/88 K 17290C/REF 818730-99 25882240192 S41599

THE INFORMATION BELOW I INFORMATION CURRENTLY A MERCHANTABILITY OR ANY SUCH INFORMATION, AND WESHOULD MAKE THEIR OWN I IS BELIEVED TO BE ACCURATE AND REPRESENTS THE BEST AVAILABLE TO US. HOWEVER, WE MAKE NO WARRANTY OF Y OTHER WARRANTY, EXPRESS OR IMPLIED, WITH RESPECT WE ASSUME NO LIABILITY RESULTING FROM ITS USE. US INVESTIGATIONS TO DETERMINE THE SUITABILITY OF THE PARTICULAR PURPOSES. CT TO USERS

# SUBSTANCE IDENTIFICATION

CAS-NUMBER 7439-97-6

TRADE NAMES/SYNONYMS: COLLOIDAL MERCURY; INORGANIC MERCURY; METALLIC MERCURY; NCI-C60399; QUICK SILVER; U151; NA 2809; M-139; M-140; M-141; ACC14020

CHEMICAL FAMILY:

MOLECULAR FORMULA: HG

MOLECULAR WEIGHT: 200.59

NFPA RATINGS (SCALE 0-3): HEALTH=3 FIRE=0 R REACTIVITY=0 **PERSISTENCE=3** 

COMPONENTS AND CONTAMINANTS

COMPONENT: MERCURY

OTHER CONTAMINANTS:

EXPOSURE LIMITS:

.1 MG(HG)/M3 OSHA CEILING .05 MG(HG)/M3 ACGIH TWA; 0.15 MG(HG)/M3 .05 MG(HG)/M3 NIOSH RECOMMENDED CEILING ACGIH STEE

1 POUND CERCLA SECTION 103 REPORTABLE QUANTITY
SUBJECT TO SARA SECTION 313 ANNUAL TOXIC CHEMICAL RELEASE REPORTING

# PHYSICAL DATA

DESCRIPTION: SILVER-WHITE, HEAVY MOBILE, LIQUID METAL

BOILING POINT: 675 F (357 C) MELTING POINT: -38 F (-39 C)

SPECIFIC GRAVITY: 13.6 VAPOR PRESSURE: 0.0012 MMHG <del>ല</del> 20

n

VAPOR

DENSITY: 7.0

SOLUBILITY IN WATER: 0.002%

SOLVENT SOLUBILITY: SOLUBLE IN SULFURIC ACID (ON BOILING), NITRIC INSOLUBLE IN ALCOHOL, ETHER, HYDROCHLORIC ACID, HYDROGEN BROMIDE, HYDROGEN IODIDE ACID;

### FIRE AND **EXPLOSION DATA**

FIRE AND EXPLOSION HAZARD:

**EXPOSED** ö HEAT OR FLAME

FIREFIGHTING MEDIA: DRY CHEMICAL, CARBON DIOXIDE, HALON, WATER SPRAY OR STANDARD FOAM (1987 EMERGENCY RESPONSE GUIDEBOOK, DOT P 5800.4).

FOR LARGER FIRES, USE WATER SPRAY, FOG OR (1987 EMERGENCY RESPONSE GUIDEBOOK, DOT P STANDARD FOAM 5800.4).

FIREFIGHTING: MOVE CONTAINERS FROM FIRE AREA IF POSSIBLE. COOL CONTAINERS EXPOSED TO FLAMES WITH WATER FROM SIDE UNTIL WELL AFTER FIRE IS OUT. STAY AWAY FROM STORAGE TANK ENDS (1987 EMERGENCY RESPONSE GUIDEBOOK, DOT P 5800.4, GUIDE PAGE 60).

USE AGENTS SUITABLE FOR TYPE OF FIRE; USE WATER IN FLOODING AVOID BREATHING CORROSIVE AND POISONOUS VAPORS, KEEP UPWIND. AMOUNTS S > FOG.

# TRANSPORTATION DATA

DEPARTMENT ORM-B 유 TRANSPORTATION HAZARD CLASSIFICATION 49CFR172.101

DEPARTMENT NONE TRANSPORTATION LABELING REQUIREMENTS 49CFR172.101 AND

DEPARTMENT OF TRANSPORTATION PACKAGING REQUIREMENTS: 49CFR173.860

### TOXICITY

.50 UG/M3/46 DAYS INHALATII .CLO; 44300 UG/M3/8 HOURS : .KIN-MAN TDLO; MUTAGENIC DA HALATION-WOMAN TCLO; 29 MG/M3/30 HOURS INHALATION-RABBIT HOURS INHALATION-MAN TCLO; 129 MG/KG/5 HOURS CONTINUOUSLY ENIC DATA (RTECS); REPRODUCTIVE EFFECTS DATA (RTECS);

RSONS WITH A SKIN AND PULMONARY SENSITIZER, NEUROT SKIN DISORDERS, INFLAMMATORY LESIONS OF DISORDERS MAY BE AT AN INCREASED RISK F PAGE 2

# HEALTH EFFECTS AND FIRST AID

INHALATION:

KST AID- REMOVE FROM EXPOSURE AREA TO FRESH AIR IMMEDIATELY. RESSURE AND ADMINISTER OXYGEN IF AVAILAR: F VEEL AIRMAY AND TREST. ADMINISTER OXYGEN IF AVAILAR: F IF BREATHING SON WARM AND

SKIN CONTACT: MERCURY:

POISONING INCLUDING FACTOR OF REPEATED HRONIC EXPOSURE- PROLONGED OR REPEATED AS AND SYSTEMIC EFFECTS AS ITIZER/NEUROTOXIN/NEPHROTOXIN.

LITE EXPOSURE SMALL AMOUNTS OF MERCURY MAY BE ABSORBED THROUGH INTACT SKIN. ALLERGIC REACTIONS THAT MAY OCCUR IN PREVIOUSLY EXPOSED PERSONS INCLUDE DERMATITIS, STOMATITIS, ENCEPHALITIS, AND DEATH. SUBCUTANEOUS INTRODUCTION, FROM HANDLING BROKEN THERMOMETERS, MAY RESULT IN LOCAL INFLAMMATION, GRANULOMATOUS SKIN REACTIONS, AND SLIGHT SIGNS OF MERCURY POISONING INCLUDING DIGESTIVE DISORDERS, METALLIC TASTE IN THE MOUTH, AND POISONING INCLUDING DIGESTIVE DISORDERS, METALLIC TASTE IN THE MOUTH, AND POISONING INCLUDING DIGESTIVE DISORDERS, METALLIC TASTE IN THE MOUTH, AND POISONING INCLUDING DIGESTIVE DISORDERS, METALLIC TASTE IN THE MOUTH, AND POISONING INCLUDING DIGESTIVE DISORDERS, METALLIC TASTE IN THE MOUTH, AND POISONING INCLUDING DIGESTIVE DISORDERS, METALLIC TASTE IN THE MOUTH, AND POISONING INCLUDING DIGESTIVE DISORDERS, METALLIC TASTE IN THE MOUTH, AND POISONING DISORDERS. AND

EXPOSURE MAY RESULT DETAILED IN CHRONIC IN DERMAL

FIRST AID-REMOVE CONTAMINATED CLOTHING AND SHOES IMMEDIATELY. WASH AFFECTED

AREA WITH SOAP OR EVIDENCE OF CHEMIC ATTENTION IMMEDIAT DETERGENT AND LARGE AMOUNTS OF WATER REMAINS (APPROXIMATELY 15-20 MINUTES). PAGE UNTIL GET ME MEDICAL 20 40 유

CONTACT:

RONIC EXPOSURE- MERCURY EXPOSURE FROM INHALATION, INGESTION, OR SKIN CONTACT MAY BE INDICATED BY MERCURIALENTIS, DISCOLORATION OF THE CRYSTALLINE LENS, ON SLIT LAMP EXAMINATION OF THE EYE. NTO THE TISSU ANIMAL STUDIES INDICATE DIFFUSION AND ABSORPTION OF MERCURY UES OF THE EYE MAY OCCUR. NO CLINICAL SIGNS OF CONJUNCTIVITIS

FIRST AID- WASH EYES IMMEDIATELY WITH LARGE AMOUNTS OF WATER, OCCASIONALLY LIFTING UPPER AND LOWER LIDS, UNTIL NO EVIDENCE OF CHEMICAL REMAINS (APPROXIMATELY 15-20 MINUTES). GET MEDICAL ATTENTION IMMEDIATELY.

IN THE BODY. OSURE- REPEATED INGESTION OF SMALL AMOUNTS OF MERCURY MAY RESULT SORPTION OF SUFFICIENT AMOUNTS TO PRODUCE TOXIC EFFECTS AS IN CHRONIC INHALATION EXPOSURE. RESPONSE. RAREL A AND VOMITING. METALLIC MERCURY IS NOT FROM THE GASTROINTESTINAL TRACT TO E. RARELY, A LARGE SINGLE DOSE MAY RESULT IN MERCURY IF SUFFICIENT AMOUNTS OF MERCURY ARE

IRST AID- IF VICTIM IS CONSCIOUS AND NOT CONVULSIVE, 4 GLASSES OF WATER, AND INDUCE VOMITING BY TOUCHING THROAT. FROM SITTING POSITION, HEAD MUST BE LOWER TO IMMEDIATELY TELY GIVE 2 TO BACK OF TO PREVENT 10

## REACTIVITY

REACTIVITY:
STABLE UNDER NORMAL TEMPERATURES AND PRESSURES

INCOMPATIBILITIES:

LINIC COMPOUNDS: VIOLENT REACTION

DIIODPHOSPHIDE: IGNITION IN MERCURY VAPORS

CHLORINE . JET OVER MERCURY SURFACE a 200-300

CETYLENE: MAY FORM EXPLOSIVE ACETYLIDES. S VIOLENTLY EXOTHERMIC AND MAY BE EXPLOSIVE IF USED. 07

LARGE PIECES
THYL AZIDE:
TRIC ACID: A
TROMETHANE: SIBLE EXPLOSION

SENSITIVE COMPOUND

ASSIUM: INTERACTION ECOME VIOLENT IF TOO IDIUM: VIOLENT EXOTH ORM ALAMGAMS IS VIGOROUSLY EXOTHERMIC AND MAY POTASSIUM IS ADDED AT ONCE.

IS VIOLENTLY EXOTHERMIC

IOLENT REACTION

DECOMPOSITION:
THERMAL DECOMPOSITION PRODUCTS INCLUDE TOXIC MERCURY VAPORS AND OXYGEN.

POLYMERIZATION:
HAZARDOUS POLYMERIZATION HAS
THE BATURES AND PRESSURES. NOT BEEN REPORTED TO OCCUR UNDER NORMAL

### STORAGE AND DISPOSAL

OBSERVE OF THIS ALL FEDERAL, SUBSTANCE. STATE AND LOCAL REGULATIONS WHEN STORING OR DISPOSING

## **XXSTORAGEXX**

STORE AWAY FROM INCOMPATIBLE SUBSTANCES

MAY BURN BUT DOES NOT IGNITE READILY. FLAMMABLE, ACCUMULATE IN TANKS AND HOPPER CARS. MAY IGNITE (OIL, ETC.). COMBUSTIBLES (WOOD, PAPER,

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THE SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT (SARA) SECTION **304 REQUIRES** 

ATELY REPORTED TO THE LOCAL EMERGIENCY RESPONSE COMMISSION (40 CFR LEPORTABLE UNDER CERCLA SECTION 10 FIED IMMEDIATELY AT (800) 424-880 ERCURY THAN THE REPORTABLE G COMMITTEE
THE RELEASE OF
NAL RESPONSE

## PROTECTIVE EQUIPMENT

VENTILATION:
PROVIDE LOCAL EXHAUST
EXPOSURE LIMITS. OR PROCESS ENCLOSURE VENTILATION TO MEET

HAZARDS OR NIOSH DEPARTMENT OF AND MAXIMUM USE CONCENTRATIONS ARE RECOMMENDATIONS HEALTH AND HUMAN SERVICES, NIOSH POCKET GUIDE TO CRITERIA DOCUMENTS; OR DEPARTMENT OF LABOR,

SPECIFIC RESPIRATOR SELECTED MUST BE BASED ON CONTAMINATION LEVELS FOUND THE WORK PLACE AND BE JOINTLY APPROVED BY THE NATIONAL INSTITUTE OF UPATIONAL SAFETY AND HEALTH ADMINISTRATION

RESPIRATOR SELECTION FOR MERCURY AND INORGANIC COMPOUNDS (AS HG):

- IJ ANY\_AIR-PURIFYING RESPIRATOR WITH A HIGH-EFFICIENCY PARTICULATE FILTER. ANY SUPPLIED-AIR RESPIRATOR. ANY SELF-CONTAINED BREATHING APPARATUS.
- MG/M3-ANY SUPPLIED-AIR RESPIRATOR OPERATED IN A ANY POWERED AIR-PURIFYING RESPIRATOR WITH PARTICULATE FILTER. A HIGH-EFFICIENCY
- Ġ PARTICULATE FILTER.

  ANY POWERED AIR-PURIFYING RESPIRATOR WITH A TIGHT-FITTING FACEPIECE AND A HIGH-EFFICIENCY PARTICULATE FILTER.

  ANY SUPPLIED-AIR RESPIRATOR WITH A TIGHT-FITTING FACEPIECE OPERATED IN A CONTINUCUS FLOW MODE. ANY SUPPLIED-AIR RESPIRATOR WITH A FULL FACEPIECE. ANY SELF-CONTAINED BREATHING APPARATUS WITH A FULL ANY AIR-PURIFYING FULL FACEPIECE RESPIRATOR WITH A FACEPIECE. HIGH-EFFICIENCY
- 8 ANY SUPPLIED-AIR RESPIRATOR WITH A HALF-MASK AND OPERATED IN A PRESSURE-DEMAND OR OTHER POSITIVE PRESSURE MODE.
- ESCAPE-ANY AIR-PURIFYING FULL FACEPIECE RESPIRATOR PARTICULATE FILTER.
  ANY APPROPRIATE ESCAPE-TYPE SELF-CONTAINED FACEPIECE RESPIRATOR WITH A HIGH-EFFICIENCY BREATHING **APPARATUS**

FOR FIREFIGHTING AND OTHER IMMEDIATELY DANGEROUS SELF-CONTAINED BREATHING APPARATUS WITH FULL FACEPIECE DEMAND OR OTHER POSITIVE PRESSURE MODE. TO LIFE OPERATED 읋 HEALTH CONDITIONS

SUPPLIED-AIR RESPIRATOR WITH FULL FACEPIECE AND OPERATED 불 PRESSURE-DEMAND

OR OTHER POSITIVE PRESSURE MODE IN SELF-CONTAINED BREATHING APPARATUS POSITIVE PRESSURE MODE. COMBINATION WITH AN AUXILIARY OPERATED IN PRESSURE-DEMAND OR OTHER

CLOTHING: EMPLOYEE MUST WEAR APPROPRIATE PROTECTIVE (IMPERVIOUS) CLOTHING AND EQUIPMENT TO PREVENT ANY POSSIBILITY OF SKIN CONTACT WITH THIS SUBSTANCE.

GLOVES: EMPLOYEE MUST SUBSTANCE. WEAR APPROPRIATE PROTECTIVE GLOVES TO PREVENT CONTACT WITH THIS

PROTECTION: LOYEE MUST WEAR SPLASH-PROOF OR ESHIELD TO PREVENT CONTACT WITH WORN. DUST-RESISTANT THIS SUBSTANCE. SAFETY GOGGLES AND A ... CONTACT LENSES SHOULD NOT

EMERGENCY WASH FACILITIES:
WHERE THERE IS ANY POSSIBILITY
EXPOSED TO THIS SUBSTANCE, THE
AND QUICK DRENCH SHOWER WITHIN THAT AN EMPLOYEE'S EYES EMPLOYER SHOULD PROVIDE THE IMMEDIATE WORK AREA AND/OR SKIN MAY BE AN EYE WASH FOUNTAIN FOR EMERGENCY USE.

AUTHORIZED - FISHER CREATION DATE: 01/31/85 SCIENTIFIC GROUP, INC.
REVISION DATE: 06/29/88

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