SAFETY DATA SHEET

MERCURY

SECTION 1 - Hazardous Ingredients/Identity Information

Trade Names/Synonyms:
Metallic Mercury
Colloidal Mercury
Inorganic Mercury
Quick Silver
Hydrargyrum

Chemical Family: Inorganic metal

CERCLA Rating (Scale 0-3)
Health - 3
Fire - 0
Reactivity - 0
Persistance - 0

Chemical Formula: Hg

CAS Number: 7439-97-6

Molecular Weight: 200.59

NERA Rating (Scale 0-4)
Health - 0
Fire - 0
Reactivity - 0

DOT Hazard Class: ORM-B

DOT Identification Number: NA 2809

SECTION 11 - Physical/Chemical Characteristics

Boiling Point: 674 Degrees F, 356.7 Degrees C

Specific Gravity: (H2O = 1) 13.9

Vapor Pressure: 0.0012 mmHG @ 20 Degrees C

Melting Point: -38.9 Degrees F

Vapor Density: (Air = 1) 7.0

Solubility in Water: Insoluble

Appearance & Odour: Silver/White liquid metal: Odourless

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SECTION 111 - Fire and Explosion Hazard Data

Flash Point: Non Flammable

Extinguishing Method: Small Fires - dry chemical, carbon dioxide, water spray or foam

Large Fires - water spray or foam

Special Fire Fighting Procedures:

Move containers from fire area if possible, cool containers exposed to flames with water from outside until well after the fire is out. Keep up-wind.

Unusual Fire and Explosion Hazards:

Slight fire and explosion hazard when exposed to heat or flames.

SECTION IV - Reactivity Data

Stability: Stable under normal temperatures and pressures

Conditions to Avoid: Elevated temperatures and open flames

Incompatible Materials:
- Acetylinic Compounds
- Ammonia
- Boron
- Diiodophosphide
- Ethylene Oxide
- MethylAzide
- Methylsilane
- Metals - Aluminium, Potassium, Lithiam, Sodium, Rubidium
- Oxidants - Bromine, Peroxyformic acid, Chlorine Dioxide, Nitric acid
- Tetracarbonylnickel
- Nitromethane
- Silver Perchlorate

Hazardous Decompostion or Byproducts: N/A

Hazardous Polymerization: None known

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SECTION V - Health Hazard Data

SKIN CONTACT

Acute Exposure: May cause redness and irritation. Sensitization dermatitis may occur in previously exposed workers. Substance may be absorbed through the skin causing anuria.

Chronic Exposure: May result in psychic disturbances, peripheral neuropathy and kidney damage as in chronic inhalation.

First Aid

Remove contaminated clothing immediately. Wash affected area with soap or mild detergent and large amounts of water until no evidence of substance remains (approx. 15-20 minutes). Get medical attention immediately.

INGESTION

Acute Exposure: Metallic mercury generally shows no effect. However, in exceptional cases existing internal sores may allow mercury to accumulate with serious or even fatal results. Also aspiration into the lungs is a remote possibility and this would cause a permanent hazard.

First Aid

If victim is conscious and not convulsive, immediately give two to four glasses of water and induce vomiting by touching finger to back of throat. From sitting position, head must be lower than hips to prevent aspiration. Keep patient warm and at rest. Get medical attention immediately.

EYE CONTACT

Acute Exposure: Contact may cause irritation.

Chronic Exposure: Mercury may be deposited in the lens of the eye, causing visual disturbances.

First Aid

Wash eyes immediately with large amounts of water, occasionally lifting upper and lower lids, until no evidence of chemical remains (approx. 15-20 minutes). Get medical attention immediately.

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SECTION VI - Precautions for Safe Handling and Use.

SPILLAGE

Isolate the area of the leak or spill. Wearing appropriate protective equipment attempt to stop leak. For small spills, take up with sand or other absorbent material and place into containers for later reclamation or disposal. For large spills, dike far ahead of spill for later reclamation or disposal. Keep unnecessary people away. Isolate hazard area and deny entry.

SECTION VII - Control Measures

Respiratory Protection

Below 1MG/M3: Use respirator fitted with mercury vapor absorbing cartridges and excess use indicator.

1MG/M3: Use supplied air respirator or self contained breathing apparatus.

5MG/M3: Use supplied air respirator with a full face piece, helmet or hood or self contained breathing apparatus with a full face piece.

28MG/M3: Use Type C supplied air respirator with a full face piece operated in pressure demand or other positive pressure mode or with full face piece, helmet or hood operated in continuous flow mode.