# MERCURIC CHLORIDE



## Section 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

**PRODUCT NAME**
MERCURIC CHLORIDE

**OTHER NAMES**

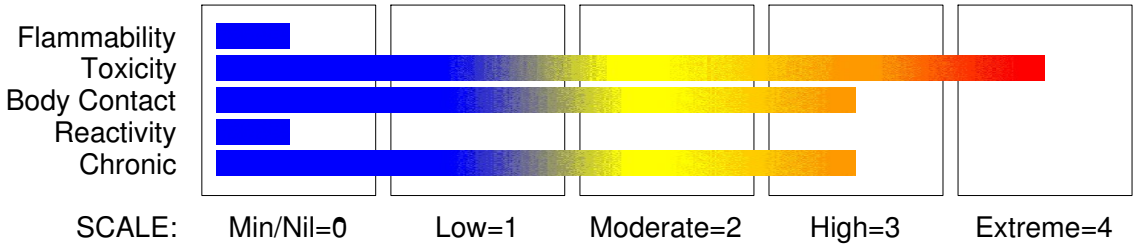
Hg-Cl2, "bichloride of mercury", "corrosive sublimate", "mercuric bichloride", "mercuric (II) chloride", "mercuric (II) chloride", "mercury perchloride", dichloromercury, Fungchex, "Emisan 6"

**PROPER SHIPPING NAME**
MERCURIC CHLORIDE

**PRODUCT USE**
Manufacture of calomel and mercury chemicals, depolariser in dry batteries.
Obsolescent use in embalming, tanning leather, preservative / disinfectant.
Reagent in analytical chemistry; intensifier in photography.
Browning and etching steel and iron; white reserve in fabric printing;
electroplating aluminium, freeing gold from lead;
preserving (kyanizing) wood and anatomical specimens.
DANGEROUS POISON.

**SUPPLIER**
Company: S D FINE- CHEM LIMITED
Address:
315- 317, T.V. INDUSTRIAL ESTATE,
248, WORLI,
MUMBAI- 400030.INDIA.
technical@sdfine.com
Telephone: 91- 22- 24959898
Telephone: 91- 22- 24959899
Fax: 91- 22- 24937232

**HAZARD RATINGS**

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## Section 2 - HAZARDS IDENTIFICATION

### GHS Classification

Acute Toxicity (Dermal) Category 1
Acute Toxicity (Inhalation) Category 2
Acute Toxicity (Oral) Category 1
Chronic Aquatic Hazard Category 1
Organ Damage Category 1
Reproductive Toxicity Category 1B
Skin Corrosion/Irritation Category 1C

### EMERGENCY OVERVIEW

#### HAZARD

DANGER
Determined by using GHS criteria:
H310 H300 H330 H360 H372 H373 H314 H410
Fatal in contact with skin
Fatal if swallowed
Fatal if inhaled
May damage the unborn child
Causes damage to organs through prolonged or repeated exposure.
May cause damage to organs through prolonged or repeated exposure.
Causes severe skin burns and eye damage
Very toxic to aquatic life with long lasting effects

#### PRECAUTIONARY STATEMENTS

**Prevention**

Use only outdoors or in a well ventilated area.
Wear respiratory protection.
Wash hands thoroughly after handling.
Do not breathe dust or mist.
Wear protective gloves/clothing
Wear protective gloves/clothing and eye/face protection.
Wash thoroughly after handling.
Do not get in eyes, on skin or on clothing
Do not handle until all safety precautions have been read and understood.
Obtain special instructions before use.
Do not breathe dust/fume/gas/mist/vapours/spray.
Use personal protective equipment as required.
Do not eat, drink or smoke when using this product.

**Response**

IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing.
IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
If exposed or concerned: Get medical attention advice.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if

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present and easy to do. Continue rinsing.
Keep container tightly closed.
Wash contaminated clothing before reuse.
Get medical advice/attention if you feel unwell.
Remove/Take off immediately all contaminated clothing
If on skin or hair: remove/take off immediately all contaminated clothing. Rinse with water/shower.
IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
Specific treatment: refer to Label or MSDS.
Immediately call a POISON CENTER or doctor/physician.
Wash/Decontaminate removed clothing before reuse.
IF ON SKIN: Gently wash with plenty of soap and water.

**Storage**

Store locked up.

**Disposal**

Dispose of contents and container in accordance with relevant legislation.

## Section 3 - COMPOSITION / INFORMATION ON INGREDIENTS

| NAME | CAS RN | % |
|---|---|---|
| mercuric chloride | 7487-94-7 | >99 |

## Section 4 - FIRST AID MEASURES

**SWALLOWED**

For advice, contact a Poisons Information Centre or a doctor.
· If swallowed and if more than 15 minutes from a hospital induce vomiting.
· Lean patient forward or place on left side (head-down position, if possible) to maintain open airway and prevent aspiration.
· NOTE: DO NOT INDUCE VOMITING in an unconscious person.
· Always wear protective glove when inducing vomiting by mechanical means.

**EYE**

If this product comes in contact with the eyes:
· Immediately hold eyelids apart and flush the eye continuously with running water.
· Ensure complete irrigation of the eye by keeping eyelids apart and away from eye and moving the eyelids by occasionally lifting the upper and lower lids.
· Continue flushing until advised to stop by the Poisons Information Centre or a doctor, or for at least 15 minutes.
· Transport to hospital or doctor without delay.
· Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.

**SKIN**

If skin or hair contact occurs:
· Immediately flush body and clothes with large amounts of water, using safety shower if available.
· Quickly remove all contaminated clothing, including footwear.
· Wash skin and hair with running water. Continue flushing with water until advised to stop by the Poisons Information Centre.
· Transport to hospital, or doctor.

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**INHALED**

· If fumes or combustion products are inhaled remove from contaminated area.
· Lay patient down. Keep warm and rested.
· Prostheses such as false teeth, which may block airway, should be removed, where possible, prior to initiating first aid procedures.
· Apply artificial respiration if not breathing, preferably with a demand valve resuscitator, bag-valve mask device, or pocket mask as trained. Perform CPR if necessary.
· Transport to hospital, or doctor, without delay.

**NOTES TO PHYSICIAN**

There are no specific antidotes for chronic poisoning, other than early detection of intoxication and removal from exposure.
Urine mercury determination may be an index of absorption. Generally, 0.1 - 0.5 mg Hg/l of urine is considered significant. [I.L.O. Encyclopedia]
· Moderate adsorption of inorganic mercury compounds through the gastro-intestinal tract (7-15%) is the principal cause of poisoning. These compounds are highly concentrated (as the mercuric (Hg (2+) form) in the kidney; acute ingestion may lead to oliguric renal failure. Severe mucosal necrosis may also result from ingestion.
· Chronic effects range from proteinuria to nephrotic syndrome. Chronic presentation also involves dermatitis, gingivitis, stomatitis, tremor and neuropsychiatric symptoms of erethism.
· Absorbed inorganic mercury does not significantly cross the blood-brain barrier.
· Emesis and lavage should be initiated following acute ingestion.
· Activated charcoal interrupts absorption; cathartics should be administered when charcoal is given.
· The use of British Anti-Lewisite is indicated in severe inorganic poisoning. Newer derivatives of BAL (e.g. dimercaptosuccinic acid, [DMSA] and 2,3-dimercapto-1 -propanesulfate [DMPS]) may prove more effective. [Ellenhorn and Barceloux: Medical Toxicology]
BIOLOGICAL EXPOSURE INDEX - BEI
These represent the determinants observed in specimens from a healthy worker exposed at the Exposure Standard (ES or TLV).

| Determinant | Index | Sampling Time | Comments |
|---|---|---|---|
| 1. Total inorganic mercury in urine | 35 ug/gm creatinine | Preshift | B |
| 2. Total inorganic mercury in blood | 15 ug/L | End of shift at end of workweek | B |

B: Background levels occur in specimens collected from subjects NOT exposed.

## Section 5 - FIRE FIGHTING MEASURES

**EXTINGUISHING MEDIA**

· Foam.
· Dry chemical powder.
· BCF (where regulations permit).
· Carbon dioxide.
· Water spray or fog - Large fires only.

**FIRE FIGHTING**

Alert Fire Brigade and tell them location and nature of hazard.
· Wear full body protective clothing with breathing apparatus.
· Prevent, by any means available, spillage from entering drains or water courses.
Use fire fighting procedures suitable for surrounding area.
Cool fire exposed containers with water spray from a protected location.

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DO NOT approach containers suspected to be hot.
If safe to do so, remove containers from path of fire.
Equipment should be thoroughly decontaminated after use.

**FIRE/EXPLOSION HAZARD**
Pollutant - contain spillage Clear area of personnel and move upwind.
· Non combustible.
· Not considered to be a significant fire risk.
· Heating may cause expansion or decomposition leading to violent rupture of containers.
· May emit corrosive, poisonous fumes.
Decomposes on heating and produces acrid and toxic fumes of: mercury vapour / mercury metal, metal oxides and hydrogen chloride.

**Personal Protective Equipment**
Breathing apparatus.
Gas tight chemical resistant suit.
Limit exposure duration to 1 BA set 30 mins.

## Section 6 - ACCIDENTAL RELEASE MEASURES

**EMERGENCY PROCEDURES**

**MINOR SPILLS**
· Clean up all spills immediately.
· Avoid contact with skin and eyes.
· Wear impervious gloves and safety glasses.
· Use dry clean up procedures and avoid generating dust.
· Sweep up or
· Vacuum up (consider explosion-proof machines designed to be grounded during storage and use).
· Place spilled material in clean, dry, sealable, labelled container.

**MAJOR SPILLS**
· Clear area of personnel and move upwind.
· Alert Fire Brigade and tell them location and nature of hazard.
· Wear breathing apparatus plus protective gloves.
· Prevent, by any means available, spillage from entering drains or water course.
· No smoking, naked lights or ignition sources.
· Increase ventilation.
· Stop leak if safe to do so.
· Use dry clean up procedures and avoid generating dust.
· DO NOT USE WATER OR NEUTRALISING AGENTS INDISCRIMINATELY ON LARGE SPILLS.
· Absorb or cover spill with sand, earth, inert material or vermiculite.
· Collect recoverable product into labelled containers for recycling.
· Collect residues and seal in labelled drums for disposal.
· After clean up operations, decontaminate and launder all protective clothing and equipment before storing and re-using.
· If contamination of drains or waterways occurs as a result of the above actions, advise emergency services.

**EMERGENCY RESPONSE PLANNING GUIDELINES (ERPG)**
The maximum airborne concentration below which it is believed that nearly all individuals could be exposed for up to one hour WITHOUT experiencing or developing

life-threatening health effects is:
mercuric chloride 12.5 mg/m$^3$

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irreversible or other serious effects or symptoms which could impair an individual's ability to take protective action is:
mercuric chloride 12.5 mg/m³

other than mild, transient adverse effects without perceiving a clearly defined odour is:
mercuric chloride 0.125 mg/m³

The threshold concentration below which most people will experience no appreciable risk of health effects:
mercuric chloride 0.035 mg/m³

American Industrial Hygiene Association (AIHA)

Ingredients considered according to the following cutoffs

| | | | |
|---|---|---|---|
| Very Toxic (T+) | >= 0.1% | Toxic (T) | >= 3.0% |
| R50 | >= 0.25% | Corrosive (C) | >= 5.0% |
| R51 | >= 2.5% | | |
| else | >= 10% | | |

where percentage is percentage of ingredient found in the mixture

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**SAFE STORAGE WITH OTHER CLASSIFIED CHEMICALS**

X X + X X +

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*+: May be stored together*
*O: May be stored together with specific preventions*
*X: Must not be stored together*

**Personal Protective Equipment advice is contained in Section 8 of the MSDS.**

## Section 7 - HANDLING AND STORAGE

**PROCEDURE FOR HANDLING**

Avoid generating and breathing dust.
- Avoid all personal contact, including inhalation.
- Wear protective clothing when risk of exposure occurs.
- Use in a well-ventilated area.
- Prevent concentration in hollows and sumps.
- DO NOT enter confined spaces until atmosphere has been checked.
- Avoid smoking, naked lights or ignition sources.
- Avoid contact with incompatible materials.
- When handling, DO NOT eat, drink or smoke.
- Keep containers securely sealed when not in use.
- Avoid physical damage to containers.
- Always wash hands with soap and water after handling.
- Work clothes should be laundered separately.
- Use good occupational work practice.
- Observe manufacturer's storing and handling recommendations.
- Atmosphere should be regularly checked against established exposure standards to ensure safe working conditions.

**SUITABLE CONTAINER**

Packaging as recommended by manufacturer.

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· Check that containers are clearly labelled.
Plastic drum or Polyethylene or polypropylene container.
Polylined drum.

**STORAGE INCOMPATIBILITY**

Avoid contamination of water, foodstuffs, feed or seed.
Segregate from phosphorus, antimony, arsenic, silver salts, alkali metals sulfides, sulfites, phosphates, oxalates, acetylene, ammonia, oxalic acid.

**STORAGE REQUIREMENTS**

· Keep dry.
· Store in original containers.
· Keep containers securely sealed.
· No smoking, naked lights or ignition sources.
· Store in a cool, dry, well-ventilated area.
· Store away from incompatible materials.
· Protect containers against physical damage.
· Check regularly for leaks.
· Observe manufacturer's storing and handling recommendations.

## Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

**EXPOSURE CONTROLS**

The following materials had no OELs on our records
• mercuric chloride: CAS:7487- 94- 7

**EMERGENCY EXPOSURE LIMITS**

| Material | Revised IDLH Value (mg/m3) | Revised IDLH Value (ppm) |
|---|---|---|
| mercuric chloride | 10 | |

**MATERIAL DATA**

NOTE: This substance has been classified by the ACGIH as A4 NOT classifiable as a Human Carcinogen.
Some jurisdictions require that health surveillance be conducted on occupationally exposed workers. Such surveillance should emphasise
· demography, occupational and medical history and advice
· physical examination with emphasis on neurological, renal and gastrointestinal systems and skin
· urinary inorganic mercury.

**PERSONAL PROTECTION**




**EYE**

· Chemical goggles.
· Full face shield.
· Contact lenses may pose a special hazard; soft contact lenses may absorb and concentrate irritants. A written policy document, describing the wearing of lens or

**continued...**

restrictions on use, should be created for each workplace or task. This should include a review of lens absorption and adsorption for the class of chemicals in use and an account of injury experience. Medical and first-aid personnel should be trained in their removal and suitable equipment should be readily available. In the event of chemical exposure, begin eye irrigation immediately and remove contact lens as soon as practicable. Lens should be removed at the first signs of eye redness or irritation - lens should be removed in a clean environment only after workers have washed hands thoroughly. [CDC NIOSH Current Intelligence Bulletin 59].

**HANDS/FEET**

DO NOT handle directly. Wear gloves and use scoop / tongs / tools.
· Barrier cream and Impervious gloves or PVC gloves.
Rubber boots or Safety footwear.

**OTHER**

Overalls or Cotton washable overalls buttoned to the neck and wrist and washable hat.
· Eyewash unit. and Ensure there is ready access to a safety shower.

**RESPIRATOR**

| Protection Factor | Half- Face Respirator | Full- Face Respirator | Powered Air Respirator |
|---|---|---|---|
| 10 x ES | P1 Air- line* | - - | PAPR- P1 - |
| 50 x ES | Air- line** | P2 | PAPR- P2 |
| 100 x ES | - | P3 | - |
| | | Air- line* | - |
| 100+ x ES | - | Air- line** | PAPR- P3 |

* - Negative pressure demand ** - Continuous flow.

The local concentration of material, quantity and conditions of use determine the type of personal protective equipment required.
For further information consult your Occupational Health and Safety Advisor.

**ENGINEERING CONTROLS**

Use in a well-ventilated area.
General exhaust is adequate under normal operating conditions. Local exhaust ventilation may be required in specific circumstances. If risk of overexposure exists, wear approved respirator. Correct fit is essential to obtain adequate protection. Provide adequate ventilation in warehouse or closed storage areas. Air contaminants generated in the workplace possess varying "escape" velocities which, in turn, determine the "capture velocities" of fresh circulating air required to effectively remove the contaminant.

| Type of Contaminant: | Air Speed: |
|---|---|
| solvent, vapours, degreasing etc., evaporating from tank (in still air). | 0.25- 0.5 m/s (50- 100 f/min) |
| aerosols, fumes from pouring operations, intermittent container filling, low speed conveyer transfers, welding, spray drift, plating acid fumes, pickling (released at low velocity into zone of active generation) | 0.5- 1 m/s (100- 200 f/min.) |
| direct spray, spray painting in shallow booths, drum filling, conveyer loading, crusher dusts, gas discharge (active generation into zone of rapid air motion) | 1- 2.5 m/s (200- 500 f/min.) |
| grinding, abrasive blasting, tumbling, high speed wheel generated dusts (released at high initial velocity into zone of very high rapid air motion). | 2.5- 10 m/s (500- 2000 f/min.) |

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Within each range the appropriate value depends on:

| Lower end of the range | Upper end of the range |
|---|---|
| 1: Room air currents minimal or favourable to capture | 1: Disturbing room air currents |
| 2: Contaminants of low toxicity or of nuisance value only. | 2: Contaminants of high toxicity |
| 3: Intermittent, low production. | 3: High production, heavy use |
| 4: Large hood or large air mass in motion | 4: Small hood- local control only |

Simple theory shows that air velocity falls rapidly with distance away from the opening of a simple extraction pipe. Velocity generally decreases with the square of distance from the extraction point (in simple cases). Therefore the air speed at the extraction point should be adjusted, accordingly, after reference to distance from the contaminating source. The air velocity at the extraction fan, for example, should be a minimum of 1-2 m/s (200-400 f/min) for extraction of solvents generated in a tank 2 meters distant from the extraction point. Other mechanical considerations, producing performance deficits within the extraction apparatus, make it essential that theoretical air velocities are multiplied by factors of 10 or more when extraction systems are installed or used.

## Section 9 - PHYSICAL AND CHEMICAL PROPERTIES

**APPEARANCE**

White crystals / powder; slightly soluble in water. WARNING: Highly toxic.
No odour. Soluble in alcohol, benzene, ether, glycerol, acetic acid.
Solubility in water: @ 20 C : 6.9 g/100 cc. and @ 100 C: 48 g/100 cc.

**PHYSICAL PROPERTIES**

Solid.

| | |
|---|---|
| Molecular Weight: 271.5 | Boiling Range (°C): 302 (sublimes) |
| Melting Range (°C): 276 (sublimes) | Specific Gravity (water=1): 5.44 @ 25 deg.C |
| Solubility in water (g/L): 6.9% @ 20 C | pH (as supplied): Not available |
| pH (1% solution): 2- 3.2 @ 0.2M | Vapour Pressure (kPa): 0.39 @ 150 deg. |
| Volatile Component (%vol): Not available | Evaporation Rate: Non Vol. @ 20 C |
| Relative Vapour Density (air=1): 9.8 @ 300 C | Flash Point (°C): Not applicable |
| Lower Explosive Limit (%): Not applicable | Upper Explosive Limit (%): Not applicable |
| Autoignition Temp (°C): Not applicable | Decomposition Temp (°C): Not available |
| State: Divided solid | |

## Section 10 - CHEMICAL STABILITY AND REACTIVITY INFORMATION

**CONDITIONS CONTRIBUTING TO INSTABILITY**

- Presence of incompatible materials.
- Product is considered stable.
- Hazardous polymerisation will not occur.

## Section 11 - TOXICOLOGICAL INFORMATION

**POTENTIAL HEALTH EFFECTS**

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## ACUTE HEALTH EFFECTS

### SWALLOWED
Severely toxic effects may result from the accidental ingestion of the material; animal experiments indicate that ingestion of less than 5 gram may be fatal or may produce serious damage to the health of the individual.
The material can produce chemical burns within the oral cavity and gastrointestinal tract following ingestion.
Symptoms of ingestion within the first few minutes may include pain, profuse vomiting and severe purging and the victim may die within a few hours from peripheral vascular collapse secondary to fluid and electrolyte loss. Primary gastroenteritis may subside spontaneously within a few days but severe haemorrhagic inflammation of the colon (colitis) has occurred as late as 9 days following ingestion. A second phase developing over 1-3 days is characterised by stomatitis (lesions of the mouth parts), membranous colitis and kidney damage (tubular nephritis). This second phase is associated with a slow and prolonged excretion of mercury by salivary glands, the gastrointestinal mucosa and kidneys. Death in this phase usually occurs as a result of kidney failure.

The alimentary effects of many mercury compounds are so rapid that the course and outlook is largely determined by events within the first 5-10 minutes. Acute systemic mercurialism may be lethal within a few minutes or death may be delayed for 5-12 days. The ionisable salts are corrosive and tissue damage occurs almost immediately in the mouth, throat and oesophagus.

### EYE
The material can produce chemical burns to the eye following direct contact. Vapours or mists may be extremely irritating.
When applied to the eye(s) of animals, the material produces severe ocular lesions which are present twenty-four hours or more after instillation.
The material may produce severe irritation to the eye causing pronounced inflammation.
Repeated or prolonged exposure to irritants may produce conjunctivitis.

### SKIN
Skin contact with the material may produce severely toxic effects; systemic effects may result following absorption and these may be fatal.
The material can produce chemical burns following direct contact with the skin.
Exposure limits with "skin" notation indicate that vapour and liquid may be absorbed through intact skin. Absorption by skin may readily exceed vapour inhalation exposure.
Symptoms for skin absorption are the same as for inhalation. Contact with eyes and mucous membranes may also contribute to overall exposure and may also invalidate the exposure standard.
Bare unprotected skin should not be exposed to this material.
The material may produce severe skin irritation after prolonged or repeated exposure, and may produce a contact dermatitis (nonallergic). This form of dermatitis is often characterised by skin redness (erythema) thickening of the epidermis.

Histologically there may be intercellular oedema of the spongy layer (spongiosis) and intracellular oedema of the epidermis. Prolonged contact is unlikely, given the severity of response, but repeated exposures may produce severe ulceration.

### INHALED
Evidence shows, or practical experience predicts, that the material produces irritation of the respiratory system in a substantial number of individuals following inhalation.
Not normally a hazard due to non-volatile nature of product.
Inhalation of vapour is more likely at higher than normal temperatures.

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**CHRONIC HEALTH EFFECTS**

Principal routes of exposure are usually by skin contact/absorption and inhalation of generated dust.
In animal tests all forms of mercury have been shown to be teratogenic with mercury ion easily crossing the placental barrier. Chronic exposures in workers may result in excessive salivation (ptyalism), anorexia, digestive disturbances, vague abdominal distress and mild diarrhoea. Renal involvement is rare. Chronic mercurialism manifests itself primarily in neurological effects with the central nervous system the principal target of damage. Tremors involving the hands and fingers and, less often, eyelids, cheeks, tongue and legs, are encountered. Motor control may be impaired resulting in slurred or scanning speech or ataxic gait. Visual and aural disturbance may occur. A common syndrome, described as "erethism," involves behavioral changes such as depression, despondency, and fearfulness. These are often accompanied by insomnia, headache and fatigue. Advanced cases exhibit memory loss, hallucinations and mental deterioration. Other symptoms may include a constant metallic taste and gingivitis of various grades leading to pyorrhea and the loosening of teeth. A dark blue line may occur along the gingival margins and a discolouration of the anterior lens surface (mercurialentis) is considered a useful diagnostic indicator of the chronic condition. Acrodynia ("pink disease") is an uncommon syndrome involving a change in colour of the of the extremities, apathy, anorexia, fever, kidney damage, perspiration, photophobia and insomnia and, most characteristically, pruritic (itchy) scaling of hands and feet.

**TOXICITY AND IRRITATION**

TOXICITY
Oral (human) LDLo: 29 mg/kg
Oral (human) TDLo: 29 mg/kg
Oral (woman) TDLo: 50 mg/kg
Oral (rat) LD50: 1 mg/kg
Dermal (rat) LD50: 41 mg/kg [RTECS]

IRRITATION
Skin (rabbit): 500 mg/24h SEVERE
Eye (rabbit): 0.05 mg/24h SEVERE

Exposure to the material for prolonged periods may cause physical defects in the developing embryo (teratogenesis).
Somnolence, tremor, convulsions, muscle weakness, obstruction and stimulation of respiration, ulceration of the stomach, duodenum and large intestine, nausea, vomiting, necrotic changes, paternal and maternal effects, foetotoxicity and specific developmental abnormalities recorded.

## Section 12 - ECOLOGICAL INFORMATION

Marine Pollutant:Extreme
The material is classified as an ecotoxin* because the Fish LC50 (96 hours) is less than or equal to 0.1 mg/l

* Classification of Substances as Ecotoxic (Dangerous to the Environment)
Appendix 8, Table 1
Compiler's Guide for the Preparation of International Chemical Safety Cards: 1993
Commission of the European Communities.

## Section 13 - DISPOSAL CONSIDERATIONS

Recycle wherever possible. Consult manufacturer for recycling options.
Consult State Land Waste Management Authority for disposal.
Puncture containers to prevent re-use.
For small quantities:
· Dissolve the material (in water or acid solution as appropriate) or convert it to a water soluble state with appropriate oxidising agent.
· Precipitate as the sulfide, adjusting the pH to neutral to complete the

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precipitation.
· Filter off sulfide solids for recovery or disposal to approved land-fill.
· Destroy excess sulfide in solution with, for example, sodium hypochlorite, neutralise, and flush to sewer (subject to local regulation).

## Section 14 - TRANSPORTATION INFORMATION



Labels Required: TOXIC
HAZCHEM: 2X

**UNDG:**

| | | | |
|---|---|---|---|
| Dangerous Goods Class: | 6.1 | Subrisk: | None |
| UN Number: | 1624 | Packing Group: | II |

Shipping Name:MERCURIC CHLORIDE

**Air Transport IATA:**

| | | | |
|---|---|---|---|
| ICAO/IATA Class: | 6.1 | ICAO/IATA Subrisk: | None |
| UN/ID Number: | 1624 | Packing Group: | II |
| ERG Code: | 6L | | |

Shipping name:MERCURIC CHLORIDE

**Maritime Transport IMDG:**

| | | | |
|---|---|---|---|
| IMDG Class: | 6.1 | IMDG Subrisk: | None |
| UN Number: | 1624 | Packing Group: | II |
| EMS Number: | F- A, S- A | Marine Pollutant: | Extreme |

Shipping name:MERCURIC CHLORIDE

## Section 15 - REGULATORY INFORMATION

**REGULATIONS**

mercuric chloride (CAS: 7487-94-7) is found on the following regulatory lists;
Great Lakes Binational Toxics Strategy Substances (U.S. and Canada) - Level I Substances
United Nations List of Prior Informed Consent Chemicals
United Nations List of Prior Informed Consent Chemicals - French
United Nations List of Prior Informed Consent Chemicals - Spanish
WHO Guidelines for Drinking-water Quality - Chemicals for which guideline values have not been established

## Section 16 - OTHER INFORMATION

**REPRODUCTIVE HEALTH GUIDELINES**

Established occupational exposure limits frequently do not take into consideration

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reproductive end points that are clearly below the thresholds for other toxic effects. Occupational reproductive guidelines (ORGs) have been suggested as an additional standard. These have been established after a literature search for the reproductive no -observed-adverse effect-level (NOAEL) and the lowest-observed-adverse-effect-level (LOAEL). In addition the US EPA's procedures for risk assessment for hazard identification and dose-response assessment as applied by NIOSH were used in the creation of such limits. Uncertainty factors (UFs) have also been incorporated.

| Ingredient | ORG | UF | Endpoint | CR | Adeq TLV |
|---|---|---|---|---|---|
| mercuric chloride | 0.01 mg/m3 | NA | NA | NA | - |

These exposure guidelines have been derived from a screening level of risk assessment and should not be construed as unequivocally safe limits. ORGS represent an 8-hour time -weighted average unless specified otherwise.
CR = Cancer Risk/10000; UF = Uncertainty factor:
TLV believed to be adequate to protect reproductive health:
LOD: Limit of detection
Toxic endpoints have also been identified as:
D = Developmental; R = Reproductive; TC = Transplacental carcinogen
Jankovic J., Drake F.: A Screening Method for Occupational Reproductive American Industrial Hygiene Association Journal 57: 641-649 (1996).

The above information is believed to be accurate and represent the best information currently available to us, but does not represent any warranty expressed or implied of the properties of the product. User should make their own investigation to determine the suitability of the information for their particular purpose.

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