Material Safety Data Sheets

Revision 3

1. IDENTIFICATION

Product Name	**Mercury(II) chloride**
Other Names	Mercuric Chloride; Dichloromercury; Sublimate; Mercury bichloride
Uses	No Data Available
Chemical Family	No Data Available
Chemical Formula	$HgCl_2$
Chemical Name	No Data Available
Product Description	No Data Available

Company	**Arman sina.co**
Contact Information	info@armansina.com **www.armansina.com**

2. HAZARD IDENTIFICATION

Hazard Categories

Acute toxicity, Oral (Category 2), H300
Skin corrosion (Category 1B), H314
Serious eye damage (Category 1), H318
Germ cell mutagenicity (Category 2), H341
Reproductive toxicity (Category 2), H361
Specific target organ toxicity - repeated exposure (Category 1), H372
Short-term (acute) aquatic hazard (Category 1), H400
Long-term (chronic) aquatic hazard (Category 1), H410

Signal Word

Danger

Hazard Statements

H300	Fatal if swallowed.
H314	Causes severe skin burns and eye damage.
H341	Suspected of causing genetic defects.
H361	Suspected of damaging fertility or the unborn child.
H372	Causes damage to organs through prolonged or repeated exposure.
H410	Very toxic to aquatic life with long lasting effects.

Precautionary Statements

Prevention

P201	Obtain special instructions before use.
P202	Do not handle until all safety precautions have been read and understood.
P260	Do not breathe dust.
P264	Wash skin thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.
P273	Avoid release to the environment.
P280	Wear protective gloves/ protective clothing/ eye protection/ face protection.

	Response	
	P301 + P310 + P330	IF SWALLOWED: Immediately call a POISON CENTER/ doctor. Rinse mouth.
	P301 + P330 + P331	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
	P303 + P361 + P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water.
	P304 + P340 + P310	IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/ doctor.
	P305 + P351 + P338 + P310	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/ doctor.
	P308 + P313	IF exposed or concerned: Get medical advice/ attention.
	P363	Wash contaminated clothing before reuse.
	P391	Collect spillage.
	Storage	
	P405	Store locked up.
	Disposal	
	P501	Dispose of contents/ container to an approved waste disposal plant.

Symbol

3. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients

Chemical Entity	Formula	CAS Number	Proportion
Mercury(II) chloride	$HgCl_2$	7487-94-7	<= 100 %

4. FIRST AID MEASURES

Swallowed If swallowed: give water to drink (two glasses at most). Seek medical advice immediately. in exceptional cases only, if medical care is not available within one hour, induce vomiting(only in persons who are wide awake and fully conscious), administer activated charcoal (20 - 40 g in a 10% slurry) and consult a doctor as quickly as possible. Do not attempt to neutralise.

Eye After eye contact: rinse out with plenty of water. Immediately call in ophthalmologist.
Remove contact lenses.

Skin In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/ shower. Call a physician immediately.

Inhaled After inhalation: fresh air. Call in physician.

Advice to Doctor Consult a doctor in case of discomfort showing the SDS for the product.

5. FIRE FIGHTING MEASURES

General Measures Suppress (knock down) gases/vapors/mists with a water spray jet. Prevent fire extinguishing water from contaminating surface water or the ground water system

Flammability Conditions No Data Available

Extinguishing Media Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Fire and Explosion Hazard No Data Available

Hazardous Products of Combustion Hydrogen chloride gas; Mercury/mercury oxides. Not combustible. Ambient fire may liberate hazardous vapours.

Special Fire Fighting Instructions Stay in danger area only with self-contained breathing apparatus. Prevent skin contact by keeping a safe distance or by wearing suitable protective clothing.

Personal Protective Equipment No Data Available

6. ACCIDENTAL RELEASE MEASURES

General Response Procedure	No Data Available
Clean Up Procedures	Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). Take up carefully. Dispose of properly. Clean up affected area. Avoid generation of dusts..
Containment	No Data Available
Decontamination	No Data Available
Environmental Precautionary Measures	Do not let product enter drains.
Evacuation Criteria	No Data Available
Personal Precautionary Measures.	Advice for non-emergency personnel: Avoid generation and inhalation of dusts in all circumstances. Avoid substance contact. Ensure adequate ventilation. Evacuate the danger area, observe emergency procedures, consult an expert. For personal protection see section 8.

7. HANDLING AND STORAGE

Handling	Work under hood. Do not inhale substance/mixture.
Storage	Tightly closed. Dry. Keep in a well-ventilated place. Keep locked up or in an area accessible only to qualified or authorized persons. Light sensitive. Moisture sensitive. Product is sensitive to light and moisture.
Container	Keep containers tightly closed

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

General	No Data Available
Exposure Limits	No Data Available
Biological Limits	No Data Available
Engineering Measures	Immediately change contaminated clothing. Apply preventive skin protection. Wash hands and face after working with substance.
Personal Protection Equipment	**Eye/face protection** Use equipment for eye protection tested and approved under appropriate; government standards such as NIOSH (US) or EN 166(EU). Tightly fitting safety goggles **Skin protection** This recommendation applies only to the product stated in the safety data sheet, supplied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN 16523-1 please contact the supplier of CE-approved gloves. Full contact ,Material: Nitrile rubber ,Minimum layer thickness: 0.11 mm Break through time: 480 min, Material tested:KCL 741 Dermatril® L This recommendation applies only to the product stated in the safety data sheet, supplied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN 16523-1 please contact the supplier of CE-approved gloves Splash contact ,Material: Nitrile rubber, Minimum layer thickness: 0.11 mm, Break through time: 480 min, Material tested:KCL 741 Dermatril® L Body Protection protective clothing, Respiratory protection, Recommended Filter type: Filter type P3 ,The entrepeneur has to ensure that maintenance, cleaning and testing of respiratory, protective devices are carried out according to the instructions of the producer. These measures have to be properly documented., required when dusts are generated. Our recommendations on filtering respiratory protection are based on the following standards: DIN EN 143, DIN 14387 and other accompanying standards relating to the used respiratory protection system.
Special Hazards Precaustions	No Data Available
Work Hygienic Practices	Immediately change contaminated clothing. Apply preventive skin protection. Wash hands and face after working with substance.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State	Solid
Appearance	Solid
Odour	no data available
Colour	No data available
pH	No Data Available
Vapour Pressure	1.7 hPa at 236 °C (457 °F)
Relative Vapour Density	No Data Available
Boiling Point	302 °C 576 °F at 1,013 hPa
Melting Point	277 °C (531 °F) - lit.
Freezing Point	No Data Available
Solubility	No Data Available
Specific Gravity	No Data Available
Flash Point	No Data Available
Auto Ignition Temp	No information available.
Evaporation Rate	No Data Available
Bulk Density	No Data Available
Corrosion Rate	No Data Available
Decomposition Temperature	No Data Available
Density	5.440 g/cm3
Specific Heat	No Data Available
Molecular Weight	271.52 g/mol
Net Propellant Weight	No Data Available
Octanol Water Coefficient	No Data Available
Particle Size	No Data Available
Partition Coefficient	No Data Available
Saturated Vapour Concentration	No Data Available
Vapour Temperature	No Data Available
Viscosity	No Data Available
Volatile Percent	No Data Available
VOC Volume	No Data Available
Additional Characteristics	No information available.
Potential for Dust Explosion	No Data Available
Fast or Intensely Burning Characteristics	No information available.
Flame Propagation or Burning Rate of Solid Materials	No information available.
Non-Flammables That Could Contribute Unusual Hazards to a Fire	No information available.
Properties That May Initiate or Contribute to Fire Intensity	No information available.
Reactions That Release Gases or Vapours	No information available.
Release of Invisible Flammable Vapours and Gases	No information available. No information available.

10. STABILITY AND REACTIVITY

General Information	Risk of explosion with: Fluorine; Alkali metals; hydrazine and derivatives; Exothermic reaction with: strong bases Strong oxidizing agents
Chemical Stability	The product is chemically stable under standard ambient conditions (See Section 7).
Conditions to Avoid	Avoid moisture. Light.
Materials to Avoid	Lead, Copper, Light metals, silver, Zinc, Tin
Hazardous Decomposition Products	In the event of fire: see section 5
Hazardous Polymerisation	No data available

11. TOXICOLOGICAL INFORMATION

General Information Carcinogenicity: This product is or contains a component that is not classifiable as to its carcinogenicity based on its IARC, ACGIH, NTP, or EPA classification. Reproductive toxicity: Suspected human reproductive toxicant Overexposure may cause reproductive disorder(s) based on tests with laboratory animals.

Acute

Acute toxicity

Acute toxicity estimate Oral - 5.1 mg/kg

(Calculation method)

Oral: No data available

Inhalation: No data available

Acute toxicity estimate Dermal - 41 mg/kg

(Calculation method)

No data available

Skin corrosion/irritation

Skin - Rabbit

Result: Severe skin irritation - 24 h

Serious eye damage/eye irritation

Eyes - Rabbit

Result: Severe eye irritation - 24 h

Respiratory or skin sensitization

No data available

12. ECOLOGICAL INFORMATION

Ecotoxicity	Toxicity to fish	mortality LOEC - Lates calcarifer - 0.113 mg/l - 96.0 h
		LC50 - Oncorhynchus mykiss (rainbow trout) - 0.016 mg/l - 96.0 h
	Toxicity to daphnia and other aquatic invertebrates	EC50 - Daphnia magna (Water flea) - 0.002 mg/l - 48 h
	Toxicity to algae	Growth inhibition EC50 - Ditylum brightwellii - 0.01 mg/l - 5 d
	Toxicity to daphnia and other aquatic invertebrates(Chronic toxicity)	mortality LOEC - Daphnia magna (Water flea) - 0.006 mg/l - 21 d
		mortality NOEC - Daphnia magna (Water flea) - 0.003 mg/l - 21 d

Persistence/Degradability	No Data Available
Mobility	No Data Available
Environmental Fate	No Data Available
Bioaccumulation Potential	No Data Available
Environmental Impact	No Data Available

13. DISPOSAL CONSIDERATIONS

General Information	Waste material must be disposed of in accordance with the national and local regulations. Leave chemicals in original containers. No mixing with other waste. Handle uncleaned containers like the product itself.
Special Precautions for Land Fill	No Data Available

14. TRANSPORT INFORMATION

Land Transport

Proper Shipping Name	MERCURIC CHLORIDE
Class	6.1
Subsidiary Risk(s)	No Data Available
EPG	No Data Available
UN Number	UN 1624
Hazchem	No Data Available
Pack Group	II
Special Provision	No Data Available

Sea Transport

Proper Shipping Name	MERCURIC CHLORIDE
Class	6.1
Subsidiary Risk(s)	No Data Available
UN Number	UN 1624
Hazchem	No Data Available
Pack Group	II
Special Provision	No Data Available
EMS	No Data Available
Marine Pollutant	yes

Air Transport

Proper Shipping Name	MERCURIC CHLORIDE
Class	6.1
Subsidiary Risk(s)	No Data Available
UN Number	UN 1624
Hazchem	No Data Available
Pack Group	II
Special Provision	No Data Available

15. OTHER INFORMATION

Revision 3

Key/Legend

< Less Than
> Greater Than
atm Atmosphere
CAS Chemical Abstracts Service (Registry Number)
cm² Square Centimetres
CO2 Carbon Dioxide
COD Chemical Oxygen Demand
deg C (° C) Degrees Celcius
deg F (° F) Degrees Farenheit
g Grams
g/cm³ Grams per Cubic Centimetre
g/l Grams per Litre
HSNO Hazardous Substance and New Organism
IDLH Immediately Dangerous to Life and Health
immiscible Liquids are insoluable in each other.
inHg Inch of Mercury
inH2O Inch of Water
K Kelvin
kg Kilogram
kg/m³ Kilograms per Cubic Metre
lb Pound
LC50 LC stands for lethal concentration. LC50 is the concentration of a material in air which causes the death of 50% (one half) of a group of test animals. The material is inhaled over a set period of time, usually 1 or 4 hours.
LD50 LD stands for Lethal Dose. LD50 is the amount of a material, given all at once, which causes the death of 50% (one half) of a group of test animals.
ltr or L Litre
m³ Cubic Metre
mbar Millibar
mg Milligram
mg/24H Milligrams per 24 Hours
mg/kg Milligrams per Kilogram
mg/m³ Milligrams per Cubic Metre
Misc or Miscible Liquids form one homogeneous liquid phase regardless of the amount of either component present.
mm Millimetre
mmH2O Millimetres of Water
mPa.s Millipascals per Second
N/A Not Applicable
NIOSH National Institute for Occupational Safety and Health
NOHSC National Occupational Heath and Safety Commission
OECD Organisation for Economic Co-operation and Development
Oz Ounce
PEL Permissible Exposure Limit
Pa Pascal
ppb Parts per Billion
ppm Parts per Million
ppm/2h Parts per Million per 2 Hours
ppm/6h Parts per Million per 6 Hours
psi Pounds per Square Inch
R Rankine
RCP Reciprocal Calculation Procedure
STEL Short Term Exposure Limit
TLV Threshold Limit Value
tne Tonne
TWA Time Weighted Average
ug/24H Micrograms per 24 Hours
UN United Nations
wt Weight