A MATERIAL SAFETY DATA SHEET
IODINE MONOCHLORIDE

1.1 Product Identifiers:

Product Name : Iodine monochloride
CAS No : 7790-99-0

1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses : Laboratory chemicals, Manufacture of substances

1.3 Details of the supplier of the safety data sheet

Supplier : Infinium Pharmachem Pvt. Ltd. (AN ISO 9001:2008 CERTIFIED CO.)
38, G.I.D.C, Sojitra
Dist: ANAND
Gujarat, India

Tel : 0091-2697-234987
Fax : 0091-2697-234987
Email : info@infiniumpharmachem.com

Synonyms : Iodine Chloride (ICl); Chlorine Iodide (ClI); Chlorine Monoiodide; Iodine Chloride; Iodine(I) Chloride; Iodochlorine; Iodomonochloride; Iodonium Chloride; Wijs chloride

CAS No. : 7790-99-0
Molecular Weight : 162,36 g/mol
Chemical Formula : ClI
3.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 [EU-GHS/CLP]

Skin corrosion (Category 1B), H314
Respiratory sensitisation (Category 1), H334
For the full text of the H-Statements mentioned in this Section, see Section 16.

Classification according to EU Directives 67/548/EEC or 1999/45/EC

C Corrosive R34, R42
For the full text of the R-phrases mentioned in this Section, see Section 16.

3.2 Label elements

Labelling according Regulation (EC) No 1272/2008 [CLP]

Pictogram

Signal word Danger

Hazard statement(s)
H314 Causes severe skin burns and eye damage.
H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled

Precautionary statement(s)
P261 Avoid breathing vapours.
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310 Immediately call a POISON CENTER or doctor/ physician.
Supplemental Hazard Statements  none

3.3 Other hazards  None

4.1 Description of first aid measures

General advice
Consult a physician. Show this safety data sheet to the doctor in attendance

If inhaled
If breathed in, move person into fresh air. If not breathing, give artificial respiration.

In case of skin contact
Take off contaminated clothing and shoes immediately. Wash off with soap and plenty of water. Consult a physician.

In case of eye contact
Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

If swallowed
Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

4.2 Most important symptoms and effects, both acute and delayed
The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11.

4.3 Indication of any immediate medical attention and special treatment needed
no data available

5.1 Extinguishing Media:

Suitable extinguishing media
Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

5.2 Special hazards arising from the substance or mixture

Hydrogen chloride gas, Hydrogen iodide

5.3 Advice for firefighters
Wear self contained breathing apparatus for fighting if necessary.

5.4 Further Information

No data available.

6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. For personal protection see section 8.

6.2 Environmental precautions

Do not let product enter drains.

6.3 Methods and materials for containment and cleaning up

Soak up with inert absorbent material and dispose of as hazardous waste. Keep in suitable, closed containers for disposal.

6.4 Reference to other sections

For disposal see section 13.

7.1 Precautions for safe Handling

Avoid contact with skin and eyes. Avoid inhalation of vapour or mist. For precautions see section 2.2.

7.2 Conditions for safe Storage, including any incompatibilities

Store in cool place. Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Recommended storage temperature: 2 - 8 °C
Handle and store under inert gas

7.3 Specific end uses

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated
8.1 Control parameters

Components with workplace control Parameters.

8.2 Exposure Controls

**Appropriate engineering controls**
Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

**Personal protective equipment**

**Eye/face protection**
Tightly fitting safety goggles. Faceshield (8-inch minimum). Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

**Skin protection**
Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.
The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

**Body Protection**

Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

**Respiratory protection**
Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

**Control of environmental exposure**

Do not let product enter drains.

9.1 Information on Basic physical & chemical properties
a) Appearance
Form: liquid
Colour: dark red, dark brown

b) Odor
no data available
c) Odor Threshold
no data available
d) pH
no data available
e) Melting point/freezing Point
no data available
f) Initial boiling point and Boiling range
97.4 °C - lit.
g) Flash point
not applicable
h) Evaporation rate
no data available
i) Flammability (solid, gas)
no data available
j) Upper/lower Flammability or explosive limits
no data available
k) Vapor pressure
no data available
l) Vapor density
5.61 - (Air = 1.0)
m) Relative density
3.24 g/cm³ at 25 °C
n) Water solubility
no data available
o) Partition coefficient: n-octanol /water
no data available
p) Auto ignition
no data available
q) Decomposition
no data available
r) Viscosity
no data available
s) Explosive properties
no data available
t) Oxidizing properties
no data available

9.2 Other safety Information

Relative vapour density 5.61 - (Air = 1.0)

10.1 Reactivity
no data available

10.2 Chemical stability
Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions
no data available

10.4 Conditions to avoid
Heat.
10.5 Incompatible materials
Organic materials, Strong bases, Metals.

10.6 Hazardous decomposition products
Other decomposition products - no data available
In the event of fire: see section 5

11.1 Information on toxicological effects

Acute toxicity
no data available

Skin corrosion/irritation
no data available.

Serious eye damage/eye irritation
no data available

Respiratory or skin sensitization
Germ cell mutagenicity
no data available

Carcinogenicity
IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC

Reproductive toxicity
Exposure to excessive amounts of iodine during pregnancy is capable of producing fetal hypothyroidism. Iodine-containing drugs have been associated with fetal goiter.

Specific target organ toxicity - single exposure
no data available

Specific target organ toxicity - repeated exposure
no data available
Aspiration hazard
no data available

Additional Information
RTECS: NN1650000

Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes, and skin., Cough, Shortness of breath, Headache, Nausea

12.1 Persistence and degradability
12.1 Toxicity
no data available

12.2 Persistence and degradability
no data available

12.3 Bioaccumulative potential
no data available

12.4 Mobility in soil
no data available

12.5 Results of PBT and vPvB assessment
PBT/vPvB assessment not available as chemical safety assessment not required/not conducted.

12.6 Other adverse effects
No data available

13.1 Waste treatment methods
Product
Offer surplus and non-recyclable solutions to a licensed disposal company.

Contaminated packaging
Dispose of as unused product.

14. TRANSPORT INFORMATION
14.1 UN number
ADR/RID: - 1792   IMDG: - 1792   IATA: - 1792

14.2 UN proper shipping name
ADR/RID: Not permitted for transport
IMDG: IODINE MONOCHLORIDE, SOLID
IATA: Iodine monochloride, solid
Passenger Aircraft: Not permitted for transport

14.3 Transport hazard class (es)
ADR/RID: - 8   IMDG: - 8   IATA: - 8

14.4 Packaging group
ADR/RID: - II   IMDG: - II   IATA: II

14.5 Environmental hazards
ADR/RID: no   IMDG Marine pollutant: no   IATA: no

14.6 Special precautions for user
no data available

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
no data available

15.2 Chemical Safety Assessment
For this product a chemical safety assessment was not carried out

Full text of H-Statements referred to under sections 2 and 3.

H314 Causes severe skin burns and eye damage.
H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
Resp. Sens. Respiratory sensitisation
Skin Corr. Skin corrosion
Full text of R-phrases referred to under sections 2 and 3

C  Corrosive
R34  Causes burns.
R42  May cause sensitisation by inhalation.

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