A MATERIAL SAFETY DATA SHEET

IODOACETIC ACID

1.1 Product Identifiers:

Product Name : Iodoacetic Acid
CAS No : 64-69-7

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 : 2-iodoacetic acid; Acetic acid; 2-iodo-Acetic acid; iodo-Acide iodoacetique; acido iodoacetico; CH2ICOOH; Iodessigsaur; iodoacetic acid; Monoiodoacetic acid; NSC 2125;

CAS No. : 64-69-7

Molecular Weight : 185.95 g/mol

Chemical Formula : C₂H₃IO₂
3.1 Classification of the substance or mixture

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

Skin corrosion (Category 1A), H314

Acute toxicity, Oral (Category 3), H301

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

T

Toxic

R25

C

Corrosive

R35

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

3.2 Label elements

Labeling according Regulation (EC) No 1272/2008

Pictogram

![Pictogram]

Signal word Danger

Hazard statement(s)

H301 Toxic if swallowed

H314 Causes severe skin burns and eye damage.

H319 Causes serious eye irritation.

Precautionary statement(s)

P280 wear protective gloves/clothing/eye protection/face protection.

P301+310 IF SWALLOWED: immediately call a PIOSON CENTER or doctor/physician.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.
Continuerinsing. Immediately call a POISON CENTER or doctor/physician.

Supplemental Hazard None

Statements

3.3 Other hazards

Vesicant.

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. Consult a physician.

In case of skin contact

Take off contaminated clothing and shoes immediately. Wash off with soap and plenty of water. Take victim immediately to hospital. 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 & efforts, 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

Carbon oxides, 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

Wear respiratory protection. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust. For personal protection see section 8.

6.2 Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

6.3 Methods and materials for containment and cleaning up

Pick up and arrange disposal without creating dust. Sweep up and shovel. 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 formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed. 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.
Recommended storage temperature: -20 °C

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
Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product.

Personal protective equipment

Eye/face protection
Face shield and safety glasses 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 particle respirator type N100 (US) or type P3 (EN 143) 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).

### 9.1 Information on Basic physical & chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value/Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Appearance</td>
<td>Form: powder</td>
</tr>
<tr>
<td>b) Odor</td>
<td>no data available</td>
</tr>
<tr>
<td>c) Odor Threshold</td>
<td>no data available</td>
</tr>
<tr>
<td>d) pH</td>
<td>1.4 at 50 g/l at 20 °C</td>
</tr>
<tr>
<td>e) Melting point/freezing Point</td>
<td>Melting point/range: 77 - 79 °C</td>
</tr>
<tr>
<td>f) Initial boiling point and Boiling range</td>
<td>208 °C at 1.013 hPa</td>
</tr>
<tr>
<td>g) Flash point</td>
<td>no data available</td>
</tr>
<tr>
<td>h) Evaporation rate</td>
<td>no data available</td>
</tr>
<tr>
<td>i) Flammability (solid, gas)</td>
<td>no data available</td>
</tr>
<tr>
<td>j) Upper/lower Flammability or explosive limits</td>
<td>no data available</td>
</tr>
<tr>
<td>k) Vapor pressure</td>
<td>8.56 hPa</td>
</tr>
<tr>
<td>l) Vapor density</td>
<td>no data available</td>
</tr>
<tr>
<td>m) Relative density</td>
<td>4.600 g/cm³</td>
</tr>
<tr>
<td>n) Water solubility</td>
<td>no data available</td>
</tr>
<tr>
<td>o) Partition coefficient: n-octanol /water</td>
<td>no data available</td>
</tr>
<tr>
<td>p) Auto ignition Temperature</td>
<td>no data available</td>
</tr>
<tr>
<td>q) Decomposition Temperature</td>
<td>no data available</td>
</tr>
<tr>
<td>r) Viscosity</td>
<td>no data available</td>
</tr>
<tr>
<td>s) Explosive properties</td>
<td>no data available</td>
</tr>
<tr>
<td>t) Oxidizing properties</td>
<td>no data available</td>
</tr>
</tbody>
</table>

### 9.2 Other safety Information

<table>
<thead>
<tr>
<th>Property</th>
<th>Value/Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bulk Density</td>
<td>890 g/l</td>
</tr>
</tbody>
</table>

### 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
no data available.

10.5 Incompatible materials
Strong bases, Strong reducing agents.

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

Hamster
fibroblast
Cytogenetic analysis
mouse
Ascites tumor
DNA inhibition
Human
HeLa cell
DNA inhibition

**Carcinogenicity**

Carcinogenicity - mouse - Skin

Tumorigenic:Equivocal tumorigenic agent by RTECS criteria. Skin and Appendages: Other: Tumors.

Tumorigenic:Tumors at site or application.

Carcinogenicity - mouse - Subcutaneous

Tumorigenic:Equivocal tumorigenic agent by RTECS criteria. Tumorigenic:Tumors at site or application.

Carcinogenicity - mouse - Skin

Tumorigenic:Neoplastic by RTECS criteria. Skin and Appendages: Other: Tumors. Tumorigenic:Tumors at site or application.

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**

Reproductive toxicity - mouse - Oral

Paternal Effects: Other effects on male. Maternal Effects: Other effects. Specific Developmental Abnormalities: Craniofacial (including nose and tongue).

Developmental Toxicity - mouse - Intramuscular

Specific Developmental Abnormalities: Craniofacial (including nose and tongue).

Developmental Toxicity - mouse - Intraperitoneal

Specific Developmental Abnormalities: Musculoskeletal system..

**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: TT2975000

Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes, and skin., spasm, inflammation and edema of the larynx, spasm, inflammation and edema of the bronchi,

pneumonitis, pulmonary edema, burning sensation, Cough, wheezing, laryngitis, Shortness of breath,

Headache, Nausea, Vomiting, Symptoms may be delayed., To the best of our knowledge, the chemical,

physical, and toxicological properties have not been thoroughly investigated.

**12.1 Persistence and degradability**
no data available

**12.2 Bioaccumulative potential**
no data available

**12.3 Mobility in soil**
no data available

**12.4 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. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

Contaminated packaging

Dispose of as unused product.

14. TRANSPORT INFORMATION

14.1 UN number
ADR/RID: - 2923 IMDG: - 2923 IATA: - 2923

14.2 UN proper shipping name
ADR/RID: CORROSIVE SOLID, TOXIC, N.O.S. (Iodoacetic acid)
IMDG: CORROSIVE SOLID, TOXIC, N.O.S. (Iodoacetic acid)
IATA: Corrosive solid, toxic, n.o.s. (Iodoacetic acid)

14.3 Transport hazard class (es)
ADR/RID: 8(6.1) IMDG: 8 (6.1) IATA: 8 (6.1)

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

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.
Acute Tox.   Acute toxicity
H301     Toxic if swallowed.
H314     Causes severe skin burns and eye damage.
Skin Corr.  Skin corrosion

Full text of R-phrases referred to under sections 2 and 3

C     Corrosive
T     Toxic
R25    Toxic if swallowed.
R35    Causes severe burns.

MSDS Creation Date: 01-01-2015
Revision #1 Date: 31-12-2017
Disclaimer:

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall Infinium Pharmachem Pvt Ltd be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if Infinium Pharmachem Pvt Ltd has been advised of the possibility of such damages.