1. Identification

Product Name  Iodoacetamide

Cat No. :  AC122270000; AC122270050; AC122270250; AC122271000; AC122275000

CAS No  144-48-9

Synonyms  No information available

Recommended Use  Laboratory chemicals.

Uses advised against  Food, drug, pesticide or biocidal product use.

2. Hazard(s) identification

Classification
This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

<table>
<thead>
<tr>
<th>Hazard</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute oral toxicity</td>
<td>Category 3</td>
</tr>
<tr>
<td>Skin Corrosion/Irritation</td>
<td>Category 1 B</td>
</tr>
<tr>
<td>Serious Eye Damage/Eye Irritation</td>
<td>Category 1</td>
</tr>
<tr>
<td>Respiratory Sensitization</td>
<td>Category 1</td>
</tr>
<tr>
<td>Skin Sensitization</td>
<td>Category 1</td>
</tr>
</tbody>
</table>

Label Elements

Signal Word  Danger

Hazard Statements

______________________________________________________________________________________________
Iodoacetamide

Revision Date 24-Dec-2021

Toxic if swallowed
May cause an allergic skin reaction
May cause allergy or asthma symptoms or breathing difficulties if inhaled
Causes severe skin burns and eye damage

Precautionary Statements
Prevention
Wash face, hands and any exposed skin thoroughly after handling
Do not eat, drink or smoke when using this product
Wear protective gloves/protective clothing/eye protection/face protection
Avoid breathing dust/fume/gas/mist/vapors/spray
In case of inadequate ventilation wear respiratory protection
Contaminated work clothing should not be allowed out of the workplace

Inhalation
If INHALED: If breathing is difficult, remove to fresh air and keep at rest in a position comfortable for breathing
If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician

Skin
If ON SKIN: Wash with plenty of soap and water
If skin irritation or rash occurs: Get medical advice/attention
Wash contaminated clothing before reuse

Eyes
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 or doctor/physician

Ingestion
If SWALLOWED: Immediately call a POISON CENTER or doctor/physician
Rinse mouth
Storage
Store locked up
Disposal
Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)
None identified

3. Composition/Information on Ingredients

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS No</th>
<th>Weight %</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-Iodoacetamide</td>
<td>144-48-9</td>
<td>&gt;95</td>
</tr>
</tbody>
</table>

4. First-aid measures

Eye Contact
Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention.

Skin Contact
Wash off immediately with plenty of water for at least 15 minutes. Get medical attention.

Inhalation
Remove to fresh air. If breathing is difficult, give oxygen. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Immediate medical attention is required.
Iodoacetamide  

Ingestion

Do NOT induce vomiting. Call a physician or poison control center immediately.

Most important symptoms and effects

May cause allergic skin reaction. Causes burns by all exposure routes. May cause allergy or asthma symptoms or breathing difficulties if inhaled. Causes eye burns. Symptoms of allergic reaction may include rash, itching, swelling, trouble breathing, tingling of the hands and feet, dizziness, lightheadedness, chest pain, muscle pain or flushing. Product is a corrosive material. Use of gastric lavage or emesis is contraindicated. Possible perforation of stomach or esophagus should be investigated: Ingestion causes severe swelling, severe damage to the delicate tissue and danger of perforation.

Notes to Physician

Treat symptomatically

5. Fire-fighting measures

Suitable Extinguishing Media

Water spray, carbon dioxide (CO2), dry chemical, alcohol-resistant foam.

Unsuitable Extinguishing Media

No information available

Flash Point

No information available

Method -

No information available

Autoignition Temperature

No information available

Explosion Limits

Upper

No data available

Lower

No data available

Sensitivity to Mechanical Impact

No information available

Sensitivity to Static Discharge

No information available

Specific Hazards Arising from the Chemical

Thermal decomposition can lead to release of irritating gases and vapors. Keep product and empty container away from heat and sources of ignition.

Hazardous Combustion Products

Nitrogen oxides (NOx). Carbon monoxide (CO), Carbon dioxide (CO2). Hydrogen iodide.

Protective Equipment and Precautions for Firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

NFPA

<table>
<thead>
<tr>
<th>Health</th>
<th>Flammability</th>
<th>Instability</th>
<th>Physical hazards</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>1</td>
<td>1</td>
<td>N/A</td>
</tr>
</tbody>
</table>

6. Accidental release measures

Personal Precautions

Use personal protective equipment as required. Ensure adequate ventilation. Avoid dust formation. Avoid contact with skin, eyes or clothing.

Environmental Precautions

Avoid release to the environment. See Section 12 for additional Ecological Information.

Methods for Containment and Clean Up

Sweep up and shovel into suitable containers for disposal. Avoid dust formation.

7. Handling and storage

Handling

Wear personal protective equipment/face protection. Ensure adequate ventilation. Avoid dust formation. Avoid contact with skin, eyes or clothing. Avoid ingestion and inhalation.

Storage.

## 8. Exposure controls / personal protection

**Exposure Guidelines**
This product does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

**Engineering Measures**
Ensure adequate ventilation, especially in confined areas. Ensure that eyewash stations and safety showers are close to the workstation location.

**Personal Protective Equipment**

### Eye/face Protection
Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

### Skin and body protection
Wear appropriate protective gloves and clothing to prevent skin exposure.

### Respiratory Protection
Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

**Hygiene Measures**
Handle in accordance with good industrial hygiene and safety practice.

## 9. Physical and chemical properties

<table>
<thead>
<tr>
<th>Physical State</th>
<th>Solid</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Off-white</td>
</tr>
<tr>
<td>Odor</td>
<td>Irritating</td>
</tr>
<tr>
<td>Odor Threshold</td>
<td>No information available</td>
</tr>
<tr>
<td>pH</td>
<td>No information available</td>
</tr>
<tr>
<td>Melting Point/Range</td>
<td>&gt; 90 °C / &gt; 194 °F</td>
</tr>
<tr>
<td>Boiling Point/Range</td>
<td>No information available</td>
</tr>
<tr>
<td>Flash Point</td>
<td>No information available</td>
</tr>
<tr>
<td>Evaporation Rate</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Flammability (solid,gas)</td>
<td>No information available</td>
</tr>
<tr>
<td>Flammability or explosive limits</td>
<td>Upper: No data available; Lower: No data available</td>
</tr>
</tbody>
</table>

### Vapor Pressure
No information available

### Vapor Density
Not applicable

### Specific Gravity
No information available

### Solubility
Slightly soluble in water

### Partition coefficient; n-octanol/water
No data available

### Autoignition Temperature
No information available

### Decomposition Temperature
No information available

### Viscosity
Not applicable

### Molecular Formula
C₂H₄INO

### Molecular Weight
184.96

## 10. Stability and reactivity

**Reactive Hazard**
None known, based on information available

**Stability**
Light sensitive. Moisture sensitive.

**Conditions to Avoid**

**Incompatible Materials**
Strong oxidizing agents, Strong acids, Strong bases, Strong reducing agents
Hazardous Decomposition Products: Nitrogen oxides (NOx), Carbon monoxide (CO), Carbon dioxide (CO₂), Hydrogen iodide.

Hazardous Polymerization: Hazardous polymerization does not occur.

Hazardous Reactions: None under normal processing.

11. Toxicological information

Acute Toxicity

Product Information

Component Information

Toxicologically Synergistic Products: No information available

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Irritation: Causes burns by all exposure routes

Sensitization: May cause sensitization by skin contact

Carcinogenicity: The table below indicates whether each agency has listed any ingredient as a carcinogen.

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS No</th>
<th>IARC</th>
<th>NTP</th>
<th>ACGIH</th>
<th>OSHA</th>
<th>Mexico</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-Iodoacetamide</td>
<td>144-48-9</td>
<td>Not listed</td>
<td>Not listed</td>
<td>Not listed</td>
<td>Not listed</td>
<td>Not listed</td>
</tr>
</tbody>
</table>

Mutagenic Effects: No information available

Reproductive Effects: No information available.

Developmental Effects: No information available.

Teratogenicity: No information available.

STOT - single exposure: None known

STOT - repeated exposure: None known

Aspiration hazard: No information available

Symptoms / effects, both acute and delayed: Symptoms of allergic reaction may include rash, itching, swelling, trouble breathing, tingling of the hands and feet, dizziness, lightheadedness, chest pain, muscle pain or flushing; Product is a corrosive material. Use of gastric lavage or emesis is contraindicated. Possible perforation of stomach or esophagus should be investigated. Ingestion causes severe swelling, severe damage to the delicate tissue and danger of perforation.

Endocrine Disruptor Information: No information available

Other Adverse Effects: The toxicological properties have not been fully investigated. See actual entry in RTECS for complete information.

12. Ecological information

Ecotoxicity: Do not empty into drains.

Persistence and Degradability: Soluble in water. Persistence is unlikely based on information available.

Bioaccumulation/ Accumulation: No information available.

Mobility: Will likely be mobile in the environment due to its water solubility.

13. Disposal considerations
Waste Disposal Methods

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

### 14. Transport information

**DOT**
- UN-No: UN2923
- Proper Shipping Name: Corrosive solid, toxic, n.o.s.
- Technical Name: 2-Iodoacetamide
- Hazard Class: 8
- Subsidiary Hazard Class: 6.1
- Packing Group: II

**TDG**
- UN-No: UN2923
- Proper Shipping Name: Corrosive solid, toxic, n.o.s.
- Hazard Class: 8
- Subsidiary Hazard Class: 6.1
- Packing Group: II

**IATA**
- UN-No: UN2923
- Proper Shipping Name: Corrosive solid, toxic, n.o.s.
- Hazard Class: 8
- Subsidiary Hazard Class: 6.1
- Packing Group: II

**IMDG/IMO**
- UN-No: UN2923
- Proper Shipping Name: Corrosive solid, toxic, n.o.s.
- Hazard Class: 8
- Subsidiary Hazard Class: 6.1
- Packing Group: II

### 15. Regulatory information

**United States of America Inventory**

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS No</th>
<th>TSCA</th>
<th>TSCA Inventory notification - Active-Inactive</th>
<th>TSCA - EPA Regulatory Flags</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-Iodoacetamide</td>
<td>144-48-9</td>
<td>X</td>
<td>ACTIVE</td>
<td>-</td>
</tr>
</tbody>
</table>

**Legend:**
- **TSCA**: US EPA (TSCA) - Toxic Substances Control Act, (40 CFR Part 710)
- X - Listed
- '-' - Not Listed

**TSCA 12(b) - Notices of Export**: Not applicable

**International Inventories**
Canada (DSL/NDSL), Europe (EINECS/ELINCS/NLP), Philippines (PICCS), Japan (ENCS), Japan (ISHL), Australia (AICS), China (IECSC), Korea (KECL).

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS No</th>
<th>DSL</th>
<th>NDSSL</th>
<th>EINECS</th>
<th>PICCS</th>
<th>ENCS</th>
<th>ISHL</th>
<th>AICS</th>
<th>IECSC</th>
<th>KECL</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-Iodoacetamide</td>
<td>144-48-9</td>
<td>X</td>
<td>-</td>
<td>205-630-1</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>KE-21033</td>
</tr>
</tbody>
</table>

**KECL** - NIER number or KE number (http://ncis.nier.go.kr/en/main.do)

**U.S. Federal Regulations**

**SARA 313**: Not applicable

**SARA 311/312 Hazard Categories**: See section 2 for more information
CWA (Clean Water Act) Not applicable
Clean Air Act Not applicable
OSHA - Occupational Safety and Health Administration Not applicable
CERCLA Not applicable
California Proposition 65 This product does not contain any Proposition 65 chemicals.
U.S. State Right-to-Know Regulations Not applicable

U.S. Department of Transportation
Reportable Quantity (RQ): N
DOT Marine Pollutant N
DOT Severe Marine Pollutant N

U.S. Department of Homeland Security
This product does not contain any DHS chemicals.

Other International Regulations
Mexico - Grade No information available

Authorisation/Restrictions according to EU REACH

Safety, health and environmental regulations/legislation specific for the substance or mixture

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS No</th>
<th>OECD HPV</th>
<th>Persistent Organic Pollutant</th>
<th>Ozone Depletion Potential</th>
<th>Restriction of Hazardous Substances (RoHS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-Iodoacetamide</td>
<td>144-48-9</td>
<td>Not applicable</td>
<td>Not applicable</td>
<td>Not applicable</td>
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</tr>
</tbody>
</table>

16. Other information

Prepared By Regulatory Affairs
Thermo Fisher Scientific
Email: EMSDS.RA@thermofisher.com

Creation Date 15-Jul-2014
Revision Date 24-Dec-2021
Print Date 24-Dec-2021
Revision Summary This document has been updated to comply with the US OSHA HazCom 2012 Standard replacing the current legislation under 29 CFR 1910.1200 to align with the Globally Harmonized System of Classification and Labeling of Chemicals (GHS).

Disclaimer
The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text

End of SDS