

# SAFETY DATA SHEET

Revision Date 23-May-2017

Revision Number 2

## 1. Identification

**Product Name** Diphenyliodonium chloride

**Cat No. :** AC117330000; AC117330100; AC117330500

**Synonyms** Chlorodiphenyliodonium.

**Recommended Use** Laboratory chemicals.

**Uses advised against** Not for food, drug, pesticide or biocidal product use

### Details of the supplier of the safety data sheet

#### Company

|                     |                     |
|---------------------|---------------------|
| Fisher Scientific   | Acros Organics      |
| One Reagent Lane    | One Reagent Lane    |
| Fair Lawn, NJ 07410 | Fair Lawn, NJ 07410 |
| Tel: (201) 796-7100 |                     |

#### **Emergency Telephone Number**

For information **US** call: 001-800-ACROS-01 / **Europe** call: +32 14 57 52 11

Emergency Number **US**:001-201-796-7100 / **Europe**: +32 14 57 52 99

**CHEMTREC** Tel. No.**US**:001-800-424-9300 / **Europe**:001-703-527-3887

## 2. Hazard(s) identification

### Classification

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

|  |            |
|--|------------|
| Acute oral toxicity                              | Category 3 |
| Skin Corrosion/irritation                        | Category 2 |
| Serious Eye Damage/Eye Irritation                | Category 2 |
| Specific target organ toxicity (single exposure) | Category 3 |
| Target Organs - Respiratory system.              |            |
| Combustible dust                                 | Yes        |

### Label Elements

#### **Signal Word**

Danger

#### **Hazard Statements**

May form combustible dust concentrations in air

Toxic if swallowed

Causes skin irritation

Causes serious eye irritation

May cause respiratory irritation

**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  
Use only outdoors or in a well-ventilated area

**Inhalation**

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing  
Call a POISON CENTER or doctor/physician if you feel unwell

**Skin**

IF ON SKIN: Wash with plenty of soap and water  
If skin irritation occurs: Get medical advice/attention  
Take off contaminated clothing and wash before reuse

**Eyes**

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing  
If eye irritation persists: Get medical advice/attention

**Ingestion**

IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician  
Rinse mouth

**Storage**

Store locked up  
Store in a well-ventilated place. Keep container tightly closed

**Disposal**

Dispose of contents/container to an approved waste disposal plant

**Hazards not otherwise classified (HNOC)**

None identified

### 3. Composition / information on ingredients

| Component                     | CAS-No    | Weight % |
|-------------------------------|-----------|----------|
| Iodonium, diphenyl-, chloride | 1483-72-3 | 97       |

### 4. First-aid measures

|  |  |
|--|--|
| <b>Eye Contact</b>                     | Immediate medical attention is required. Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.  |
| <b>Skin Contact</b>                    | Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Immediate medical attention is required.                                     |
| <b>Inhalation</b>                      | Remove from exposure, lie down. Move to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Immediate medical attention is required. |
| <b>Ingestion</b>                       | Do not induce vomiting. Call a physician immediately. Clean mouth with water.  |
| <b>Most important symptoms/effects</b> | No information available.  |
| <b>Notes to Physician</b>              | Treat symptomatically  |

## 5. Fire-fighting measures

**Suitable Extinguishing Media** Carbon dioxide (CO<sub>2</sub>). Dry chemical. Chemical 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**

Fine dust dispersed in air may ignite.

**Hazardous Combustion Products**

Hydrogen chloride gas Carbon monoxide (CO) Carbon dioxide (CO<sub>2</sub>) Chlorine 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**

**Health**  
3

**Flammability**  
1

**Instability**  
0

**Physical hazards**  
N/A

## 6. Accidental release measures

**Personal Precautions** Ensure adequate ventilation. Use personal protective equipment.

**Environmental Precautions** See Section 12 for additional ecological information.

**Methods for Containment and Clean Up** Avoid dust formation. Sweep up or vacuum up spillage and collect in suitable container for disposal. Do not let this chemical enter the environment.

## 7. Handling and storage

**Handling** Do not breathe dust. Do not breathe vapors or spray mist. Do not get in eyes, on skin, or on clothing. Do not ingest. Use only in area provided with appropriate exhaust ventilation.

**Storage** Keep in a dry place. Keep container tightly closed. Corrosives area. Keep refrigerated.

## 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

|   |                                      |
|---|--------------------------------------|
| <b>Physical State</b>                         | Powder Solid                         |
| <b>Appearance</b>                             | Light yellow                         |
| <b>Odor</b>                                   | Odorless                             |
| <b>Odor Threshold</b>                         | No information available             |
| <b>pH</b>                                     | No information available             |
| <b>Melting Point/Range</b>                    | 227 - 228 °C / 440.6 - 442.4 °F      |
| <b>Boiling Point/Range</b>                    | No information available             |
| <b>Flash Point</b>                            | No information available             |
| <b>Evaporation Rate</b>                       | No information available             |
| <b>Flammability (solid,gas)</b>               | No information available             |
| <b>Flammability or explosive limits</b>       |                                      |
| Upper   | No data available                    |
| Lower   | No data available                    |
| <b>Vapor Pressure</b>                         | No information available             |
| <b>Vapor Density</b>                          | No information available             |
| <b>Specific Gravity</b>                       | No information available             |
| <b>Solubility</b>                             | No information available             |
| <b>Partition coefficient; n-octanol/water</b> | No data available                    |
| <b>Autoignition Temperature</b>               | No information available             |
| <b>Decomposition Temperature</b>              | No information available             |
| <b>Viscosity</b>                              | No information available             |
| <b>Molecular Formula</b>                      | C <sub>12</sub> H <sub>10</sub> Cl I |
| <b>Molecular Weight</b>                       | 316.57                               |

## 10. Stability and reactivity

|   |   |
|---|---|
| <b>Reactive Hazard</b>                  | None known, based on information available  |
| <b>Stability</b>                        | Stable under normal conditions.   |
| <b>Conditions to Avoid</b>              | Incompatible products. Exposure to moist air or water.  |
| <b>Incompatible Materials</b>           | Strong oxidizing agents   |
| <b>Hazardous Decomposition Products</b> | Hydrogen chloride gas, Carbon monoxide (CO), Carbon dioxide (CO <sub>2</sub> ), Chlorine, Hydrogen iodide |
| <b>Hazardous Polymerization</b>         | No information available.   |
| <b>Hazardous Reactions</b>              | None under normal processing.   |

## 11. Toxicological information

**Acute Toxicity****Product Information**

No acute toxicity information is available for this product

**Component Information**

| Component                     | LD50 Oral               | LD50 Dermal | LC50 Inhalation |
|-------------------------------|-------------------------|-------------|-----------------|
| Iodonium, diphenyl-, chloride | LD50 = 60 mg/kg ( Rat ) | Not listed  | Not listed      |

**Toxicologically Synergistic Products**

No information available

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

**Irritation** No information available

**Sensitization** No information available

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

| Component                     | CAS-No    | IARC       | NTP        | ACGIH      | OSHA       | Mexico     |
|-------------------------------|-----------|------------|------------|------------|------------|------------|
| Iodonium, diphenyl-, chloride | 1483-72-3 | Not listed | Not listed | Not listed | Not listed | Not listed |

**Mutagenic Effects** No information available

**Reproductive Effects** No information available.

**Developmental Effects** No information available.

**Teratogenicity** No information available.

**STOT - single exposure** Respiratory system

**STOT - repeated exposure** None known

**Aspiration hazard** No information available

**Symptoms / effects, both acute and delayed** No information available

**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** No information available

**Bioaccumulation/ Accumulation** No information available.

**Mobility** No information available.

## 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

**Hazard Class** 8

**Subsidiary Hazard Class** 6.1

**Packing Group** II

### TDG

**UN-No** UN2923

**Hazard Class** 8

**Subsidiary Hazard Class** 6.1

**Packing Group** II

### IATA

**UN-No** 2811  
**Proper Shipping Name** TOXIC SOLID, ORGANIC, N.O.S.\*  
**Hazard Class** 6.1  
**Subsidiary Hazard Class** 6.1  
**Packing Group** III

**IMDG/IMO**

**UN-No** 2811  
**Proper Shipping Name** TOXIC SOLID, ORGANIC, N.O.S.  
**Hazard Class** 6.1  
**Subsidiary Hazard Class** 6.1  
**Packing Group** III

## 15. Regulatory information

**International Inventories**

| Component                     | TSCA | DSL | NDSL | EINECS    | ELINCS | NLP | PICCS | ENCS | AICS | IECSC | KECL |
|-------------------------------|------|-----|------|-----------|--------|-----|-------|------|------|-------|------|
| Iodonium, diphenyl-, chloride | X    | -   | X    | 216-049-8 | -      |     | -     | -    | -    | X     | -    |

**Legend:**

X - Listed

E - Indicates a substance that is the subject of a Section 5(e) Consent order under TSCA.

F - Indicates a substance that is the subject of a Section 5(f) Rule under TSCA.

N - Indicates a polymeric substance containing no free-radical initiator in its inventory name but is considered to cover the designated polymer made with any free-radical initiator regardless of the amount used.

P - Indicates a commenced PMN substance

R - Indicates a substance that is the subject of a Section 6 risk management rule under TSCA.

S - Indicates a substance that is identified in a proposed or final Significant New Use Rule

T - Indicates a substance that is the subject of a Section 4 test rule under TSCA.

XU - Indicates a substance exempt from reporting under the Inventory Update Rule, i.e. Partial Updating of the TSCA Inventory Data Base Production and Site Reports (40 CFR 710(B)).

Y1 - Indicates an exempt polymer that has a number-average molecular weight of 1,000 or greater.

Y2 - Indicates an exempt polymer that is a polyester and is made only from reactants included in a specified list of low concern reactants that comprises one of the eligibility criteria for the exemption rule.

**U.S. Federal Regulations**

**TSCA 12(b)** Not applicable

**SARA 313** Not applicable

**SARA 311/312 Hazard Categories**

|                                   |     |
|-----------------------------------|-----|
| Acute Health Hazard               | Yes |
| Chronic Health Hazard             | No  |
| Fire Hazard                       | Yes |
| Sudden Release of Pressure Hazard | No  |
| Reactive Hazard                   | No  |

**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**

|                       |                          |
|-----------------------|--------------------------|
| <b>Mexico - Grade</b> | No information available |
|-----------------------|--------------------------|

**16. Other information**

|                    |  |
|--------------------|--|
| <b>Prepared By</b> | Regulatory Affairs<br>Thermo Fisher Scientific<br>Email: EMSDS.RA@thermofisher.com |
|--------------------|--|

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| <b>Revision Date</b> | 23-May-2017 |
|----------------------|-------------|

|                   |             |
|-------------------|-------------|
| <b>Print Date</b> | 23-May-2017 |
|-------------------|-------------|

|                         |   |
|-------------------------|---|
| <b>Revision Summary</b> | 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**