1. IDENTIFICATION

Product name: Cesium Chloride
Product code: C2203

Product use: For laboratory research purposes.
Restrictions on use: Not for drug or household use.

2. HAZARD(S) IDENTIFICATION

OSHA Haz Com: CFR 1910.1200: Not classifiable

Signal word: None
Hazard Statement(s): None
Pictogram(s) or Symbol(s): None
Precautionary Statement(s): None

Hazards not otherwise classified: [HNOC] May be harmful if swallowed.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance/Mixture: Substance
Components: Cesium Chloride
Percent: >99.0%(T)
CAS Number: 7647-17-8
Molecular Weight: 168.36
Chemical Formula: CsCl

4. FIRST-AID MEASURES

Inhalation: If a person breathes large amounts of this chemical, move the exposed person to fresh air at once.
Skin contact: If a person feels unwell or symptoms of skin irritation appear, consult a physician.
Eye contact: If this chemical contacts the eyes, promptly wash (irigate) the eyes with large amounts of water, occasionally lifting the lower and upper eyelids.
Ingestion: If swallowed, seek medical advice immediately and show the container or label.

Symptoms/effects:
Acute: No data available
Delayed: No data available
4. FIRST-AID MEASURES

Immediate medical attention: Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media: Use extinguishing media suitable for surrounding materials.

Specific hazards arising from the chemical
Hazardous combustion products: These products include: Halogenated compounds Metallic oxides
Other specific hazards: WARNING: Highly toxic HCl gas is produced during combustion.

Special precautions for fire-fighters: Not available
Special protective equipment for fire-fighters: Not available

6. ACCIDENTAL RELEASE MEASURES

Personal precautions: Do not touch damaged containers or spilled material unless wearing appropriate protective clothing (Section 8).
Personal protective equipment: Safety glasses.
Emergency procedures: In case of a spill and/or a leak, always shut off any sources of ignition, ventilate the area, and exercise caution.

Methods and materials for containment and cleaning up:
Dike far ahead of liquid spill for later disposal.
Environmental precautions: Prevent entry into sewers, basements or confined areas.

7. HANDLING AND STORAGE

Precautions for safe handling: Follow safe industrial hygiene practices and always wear proper protective equipment when handling this compound.
Conditions for safe storage: Keep container tightly closed in a dry and well-ventilated place.
Storage incompatibilities: Store away from oxidizing agents

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure limits: No data available

Appropriate engineering controls: Follow safe industrial engineering/laboratory practices when handling any chemical.

Personal protective equipment
Respiratory protection: Be sure to use a MSHA/NIOSH approved respirator or equivalent.
Hand protection: Wear protective gloves.
Eye protection: Safety glasses.
Skin and body protection: Lab coat.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state (20°C): Solid
Form: Crystal - Powder
Color: White
Odor: No data available
Odor threshold: No data available
9. PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Melting point/freezing point</td>
<td>645°C (1193°F)</td>
</tr>
<tr>
<td>Boiling point/range</td>
<td>No data available</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>No data available</td>
</tr>
<tr>
<td>Relative density</td>
<td>No data available</td>
</tr>
<tr>
<td>Kinematic Viscosity</td>
<td>No data available</td>
</tr>
<tr>
<td>Partition coefficient n-octanol/water (log P_{ow})</td>
<td>No data available</td>
</tr>
<tr>
<td>Flash point</td>
<td>No data available</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>No data available</td>
</tr>
<tr>
<td>Solubility(ies)</td>
<td></td>
</tr>
</tbody>
</table>

10. STABILITY AND REACTIVITY

| Reactivity                      | Not Available.                      |
| Chemical Stability              | Stable under recommended storage conditions. (See Section 7) |
| Possibility of Hazardous Reactions | No hazardous reactivity has been reported. |
| Conditions to avoid             | Avoid excessive heat and light.      |
| Incompatible materials          | Oxidizing agents                    |
| Hazardous Decomposition Products| No data available                    |

11. TOXICOLOGICAL INFORMATION

| RTECS Number                   | FK9625000                           |
| Acute Toxicity                 |                                     |
| orl-rat LD50:2004 mg/kg        | ipr-rat LD50:1316 mg/kg             |
| ivn-rat LD50:1075 mg/kg        | scu-rat LD50:2590 mg/kg             |
| Skin corrosion/irritation      | No data available                   |
| Serious eye damage/irritation  | No data available                   |
| Respiratory or skin sensitization | No data available                  |
| Germ cell mutagenicity         |                                     |
| cyt-mus-orl 125 mg/kg          | mnt-mus-orl 1000 mg/kg              |
| Carcinogenicity                | No data available                   |
| Reproductive toxicity          |                                     |
| orl-rat TLDLo:706 mg/kg(1-21D pre/21D post) | orl-mus TLDLo:262 gm/kg(1-21D preg/21D post) |
| Routes of Exposure             | Inhalation, Eye contact, Ingestion, Skin contact. |
| Symptoms related to exposure   | Overexposure may result in serious illness or death. |
| Potential Health Effects       | May be harmful if inhaled or ingested. Overexposure may result in serious illness or death. |
| Target organ(s)                | No data available                   |
12. ECOLOGICAL INFORMATION

Ecotoxicity

- **Fish:** 96h LC50 >500 mg/L (Oryzias latipes)
- **Crustacea:** No data available
- **Algae:** No data available

Persistence and degradability:
- No data available

Bioaccumulative potential (BCF):
- 1.7 - 4.9 (conc. 2500 ug/L), <8.1 (conc. 250 ug/L)

Mobility in soil:
- No data available

Partition coefficient:
- n-octanol/water (log P<sub>ow</sub>)
- No data available

Soil adsorption (K<sub>oc</sub>):
- No data available

Henry’s Law:
- No data available

13. DISPOSAL CONSIDERATIONS

Disposal of product:
- Recycle to process if possible.

Disposal of container:
- Dispose of as unused product.

Other considerations:
- Observe all federal, state and local regulations when disposing of the substance.

14. TRANSPORT INFORMATION

**DOT (US)**
- Non-hazardous for transportation.

**IATA**
- Non-hazardous for transportation.

**IMDG**
- Non-hazardous for transportation.

15. REGULATORY INFORMATION

**Toxic Substance Control Act (TSCA 8b.):**
- This product is ON the EPA Toxic Substances Control Act (TSCA) inventory.

**US Federal Regulations**

**CERCLA Hazardous substance and Reportable Quantity:**
- **SARA 313:** Not Listed
- **SARA 302:** Not Listed

**State Regulations**

**State Right-to-Know**
- **Massachusetts:** Not Listed
- **New Jersey:** Not Listed
- **Pennsylvania:** Not Listed
- **California Proposition 65:** Not Listed

**Other Information**

**NFPA Rating:**
- Health: 1
- Flammability: 0
- Instability: 0

**HMIS Classification:**
- Health: 1
- Flammability: 0
- Physical: 0

**International Inventories**

**WHMIS hazard class:** No data available.

**EC-No:** 231-600-2

16. OTHER INFORMATION

**Revision date:** 10/06/2014
**Revision number:** 2
16. OTHER INFORMATION

TCI chemicals are for research purposes only and are NOT intended for use as drugs, food additives, households, or pesticides. The information herein is believed to be correct, but does not claim to be all inclusive and should be used only as a guide. Neither the above named supplier nor any of its affiliates or subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All chemical reagents must be handled with the recognition that their chemical, physiological, toxicological, and hazardous properties have not been fully investigated or determined. All chemical reagents should be handled only by individuals who are familiar with their potential hazards and who have been fully trained in proper safety, laboratory, and chemical handling procedures. Although certain hazards are described herein, we can not guarantee that these are the only hazards which exist. Our SDS are based only on data available at the time of shipping and are subject to change without notice as new information is obtained. Avoid long storage periods since the product is subject to degradation with age and may become more dangerous or hazardous. It is the responsibility of the user to request updated SDS for products that are stored for extended periods. Disposal of unused product must be undertaken by qualified personnel who are knowledgeable in all applicable regulations and follow all pertinent safety precautions including the use of appropriate protective equipment (e.g. protective goggles, protective clothing, breathing equipment, face mask, fume hood). For proper handling and disposal, always comply with federal, state and local regulations.