CESIUM CHROMATE 99.9+% (cas 56320-90-2) MSDS

1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product identifiers
Product name : Cesium chromate
Product Number : 401005
Brand : 
Index-No. : 024-017-00-8
CAS-No. : 13454-78-9

1.2 Relevant identified uses of the substance or mixture and uses advised against
Identified uses : Laboratory chemicals, Manufacture of substances

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture
Classification according to Regulation (EC) No 1272/2008 [EU-GHS/CLP]
Oxidizing solids (Category 2)
Skin sensitization (Category 1)
Carcinogenicity, Inhalation (Category 1B)
Acute aquatic toxicity (Category 1)
Chronic aquatic toxicity (Category 1)

Classification according to EU Directives 67/548/EEC or 1999/45/EC
May cause cancer by inhalation. May cause sensitization by skin contact. Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. Contact with combustible material may cause fire.

2.2 Label elements

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

Signal word Danger

Hazard statement(s)
H272 May intensify fire; oxidiser.
H317 May cause an allergic skin reaction.
H350i May cause cancer by inhalation.
H410 Very toxic to aquatic life with long lasting effects.

Precautionary statement(s)
P201 Obtain special instructions before use.
P220 Keep/Store away from clothing/ combustible materials.
P273 Avoid release to the environment.
P280 Wear protective gloves.
P308 + P313 IF exposed or concerned: Get medical advice/ attention.
P501 Dispose of contents/ container to an approved waste disposal plant.

Supplemental Hazard Statements none

Hazard symbol(s)

R-phrase(s)
R49 May cause cancer by inhalation.
R43 May cause sensitization by skin contact.
R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R8 Contact with combustible material may cause fire.

S-phrase(s)
S53 Avoid exposure - obtain special instructions before use.
S45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
Restricted to professional users.

2.3 Other hazards - none

3. COMPOSITION/INFORMATION ON INGREDIENTS
3.1 Substances
   Formula: CrCs2O4
   Molecular Weight: 381.80 g/mol

<table>
<thead>
<tr>
<th>Component</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cesium chromate</td>
<td></td>
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<td>CAS-No.</td>
<td>13454-78-9</td>
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<td>EC-No.</td>
<td>236-640-4</td>
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<td>Index-No.</td>
<td>024-017-00-8</td>
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</tbody>
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4. FIRST AID MEASURES
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
   Wash off with soap and plenty of water. Consult a physician.

   In case of eye contact
   Flush eyes with water as a precaution.

   If swallowed
   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
   Exposure to chromate salts has been reported to produce skin and nasal ulcerations with continued exposure leading to perforation of the nasal septa. To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

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

5. FIREFIGHTING MEASURES
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
   Cesium/chromium oxides, Chromium oxides

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

5.4 Further information
   Use water spray to cool unopened containers.

6. ACCIDENTAL RELEASE MEASURES
6.1 Personal precautions, protective equipment and emergency procedures
   Use personal protective equipment. Avoid dust formation. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.

6.2 Environmental precautions
   Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

6.3 Methods and materials for containment and cleaning up
   Sweep up and shovel. Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations (see section 13). Keep in suitable, closed containers for disposal.

6.4 Reference to other sections
   For disposal see section 13.

7. HANDLING AND STORAGE
7.1 Precautions for safe handling
   Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Avoid exposure - obtain special
instructions before use.
Provide appropriate exhaust ventilation at places where dust is formed. Keep away from sources of ignition.
- No smoking. Keep away from heat and sources of ignition.

7.2 Conditions for safe storage, including any incompatibilities
Store in cool place. Keep container tightly closed in a dry and well-ventilated place.

7.3 Specific end uses
no data available

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

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
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. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

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<tbody>
<tr>
<td>a)</td>
<td>Appearance</td>
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<td></td>
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<tr>
<td>b)</td>
<td>Odour</td>
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<tr>
<td>c)</td>
<td>Odour Threshold</td>
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<td></td>
<td></td>
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<tr>
<td>d)</td>
<td>pH</td>
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<td>e)</td>
<td>Melting point/freezing point</td>
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<td></td>
<td></td>
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<tr>
<td>f)</td>
<td>Initial boiling point and boiling range</td>
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<tr>
<td>g)</td>
<td>Flash point</td>
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<tr>
<td>h)</td>
<td>Evaporation rate</td>
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<td>i)</td>
<td>Flammability (solid, gas)</td>
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<td></td>
<td></td>
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<tr>
<td>j)</td>
<td>Upper/lower flammability or explosive limits</td>
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<tr>
<td>k)</td>
<td>Vapour pressure</td>
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<td></td>
<td></td>
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<tr>
<td>l)</td>
<td>Vapour density</td>
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<td></td>
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<tr>
<td>m)</td>
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<tr>
<td>n)</td>
<td>Water solubility</td>
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<tr>
<td>o)</td>
<td>Partition coefficient: n-octanol/water</td>
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<td></td>
<td></td>
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<tr>
<td>p)</td>
<td>Autoignition temperature</td>
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</table>
q) Decomposition temperature  no data available
r) Viscosity  no data available
s) Explosive properties  no data available
t) Oxidizing properties  The substance or mixture is classified as oxidizing with the category 2.

9.2 Other safety information  no data available

10. STABILITY AND REACTIVITY

10.1 Reactivity  no data available

10.2 Chemical stability  no data available

10.3 Possibility of hazardous reactions  no data available

10.4 Conditions to avoid  no data available

10.5 Incompatible materials  Strong reducing agents, acids

10.6 Hazardous decomposition products  Other decomposition products - no data available

11. TOXICOLOGICAL INFORMATION

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  May cause sensitization by skin contact.

Germ cell mutagenicity  no data available
Carcinogenicity  Possible human carcinogen

IARC:  1 - Group 1: Carcinogenic to humans (Cesium chromate)

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

Potential health effects

Inhalation  May be harmful if inhaled. May cause respiratory tract irritation.
Ingestion  May be harmful if swallowed.
Skin  May be harmful if absorbed through skin. May cause skin irritation.
Eyes  May cause eye irritation.

Signs and Symptoms of Exposure
Exposure to chromate salts has been reported to produce skin and nasal ulcerations with continued exposure leading to perforation of the nasal septa. To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Additional Information
RTECS: Not available

12. ECOLOGICAL INFORMATION
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
no data available

12.6 Other adverse effects
Very toxic to aquatic life.

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods
Product
Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable. 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: 1479  IMDG: 1479  IATA: 1479

14.2 UN proper shipping name
ADR/RID: OXIDIZING SOLID, N.O.S. (Cesium chromate)
IMDG: OXIDIZING SOLID, N.O.S. (Cesium chromate)
IATA: Oxidizing solid, n.o.s. (Cesium chromate)

14.3 Transport hazard class(es)
ADR/RID: 5.1  IMDG: 5.1  IATA: 5.1

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

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

14.6 Special precautions for user
no data available

15. REGULATORY INFORMATION

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
no data available

16. OTHER INFORMATION

Further information
The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information this document is based on the resent state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. guidechem shall not be held liable for any damage resulting from handling or from contact with the above product.
See reverse side of invoice or packing slip for additional terms and conditions of sale.