

# Safety Data Sheet

acc. to OSHA HCS

Printing date 07/09/2024

Reviewed on 07/08/2024

## 1 Identification

- **Product identifier**
- **Trade name:** Cesium chromate
- **Article number:** 216400
- **CAS Number:**  
13454-78-9
- **EC number:**  
236-640-4
- **Application of the substance / the mixture** Laboratory chemicals for research and development
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**  
BeanTown Chemical  
9 Sagamore Park Road  
Hudson, NH 03051  
USA
- 
- **Phone:** (603) 402-2234
- **Fax:** (603) 402-9713
- **Email:** [technical@beantownchem.com](mailto:technical@beantownchem.com)
- **www.beantownchem.com**
- **Information department:** Technical Support Department
- **Emergency telephone number:**  
During normal operating hours, please call (603) 402-2234  
After hours, please call Chemtrec at (800) 424-9300

## 2 Hazard(s) identification

- **Classification of the substance or mixture**



GHS08 Health hazard

Carc. 1A H350 May cause cancer.



GHS07

Skin Sens. 1 H317 May cause an allergic skin reaction.

- **Label elements**
- **GHS label elements** The substance is classified and labeled according to the Globally Harmonized System (GHS).
- **Hazard pictograms**



GHS07



GHS08

- **Signal word** Danger
- **Hazard-determining components of labeling:**  
Cesium chromate
- **Hazard statements**  
May cause an allergic skin reaction.  
May cause cancer.

(Contd. on page 2)

# Safety Data Sheet

acc. to OSHA HCS

Printing date 07/09/2024

Reviewed on 07/08/2024

**Trade name: Cesium chromate**

(Contd. of page 1)

- **Precautionary statements**
  - Avoid breathing dust/fume/gas/mist/vapors/spray*
  - Wear protective gloves/protective clothing/eye protection/face protection.*
  - IF exposed or concerned: Get medical advice/attention.*
  - Wash contaminated clothing before reuse.*
  - Store locked up.*
  - Dispose of contents/container in accordance with local/regional/national/international regulations.*
- **Other hazards**
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

### 3 Composition/information on ingredients

- **Chemical characterization: Substances**
- **CAS No. Description**
  - 13454-78-9 Cesium chromate*
- **Identification number(s)**
- **EC number:** 236-640-4

### 4 First-aid measures

- **Description of first aid measures**
- **After inhalation:**
  - Supply fresh air and to be sure call for a doctor.*
  - In case of unconsciousness place patient stably in side position for transportation.*
- **After skin contact:** *Immediately wash with water and soap and rinse thoroughly.*
- **After eye contact:** *Rinse opened eye for several minutes under running water.*
- **After swallowing:** *If symptoms persist consult doctor.*
- **Information for doctor:**
- **Most important symptoms and effects, both acute and delayed** *No further relevant information available.*
- **Indication of any immediate medical attention and special treatment needed**
  - No further relevant information available.*

### 5 Fire-fighting measures

- **Extinguishing media**
- **Suitable extinguishing agents:** *Use fire fighting measures that suit the environment.*
- **Special hazards arising from the substance or mixture** *No further relevant information available.*
- **Advice for firefighters**
- **Protective equipment:** *No special measures required.*

### 6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures** *Not required.*
- **Environmental precautions:** *Do not allow to enter sewers/ surface or ground water.*
- **Methods and material for containment and cleaning up:**
  - Dispose contaminated material as waste according to item 13.*
  - Ensure adequate ventilation.*
- **Reference to other sections**
  - See Section 7 for information on safe handling.*

(Contd. on page 3)

# Safety Data Sheet

acc. to OSHA HCS

Printing date 07/09/2024

Reviewed on 07/08/2024

**Trade name: Cesium chromate**

(Contd. of page 2)

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

**· Protective Action Criteria for Chemicals**

**· PAC-1:**

Substance is not listed.

**· PAC-2:**

Substance is not listed.

**· PAC-3:**

Substance is not listed.

## 7 Handling and storage

**· Handling:**

**· Precautions for safe handling**

Ensure good ventilation/exhaustion at the workplace.

Open and handle receptacle with care.

**· Information about protection against explosions and fires:** Keep respiratory protective device available.

**· Conditions for safe storage, including any incompatibilities**

**· Storage:**

**· Requirements to be met by storerooms and receptacles:** No special requirements.

**· Information about storage in one common storage facility:** Not required.

**· Further information about storage conditions:** Keep receptacle tightly sealed.

**· Specific end use(s)** No further relevant information available.

## 8 Exposure controls/personal protection

**· Additional information about design of technical systems:**

Properly operating chemical fume hood designed for hazardous chemicals and having an average face velocity of at least 100 feet per minute

**· Control parameters**

**· Components with limit values that require monitoring at the workplace:**

**13454-78-9 Cesium chromate**

PEL Long-term value: 0.005\* mg/m<sup>3</sup>  
 Ceiling limit value: 0.1\*\* mg/m<sup>3</sup>  
 \*as Cr(VI) \*\*as CrO<sub>3</sub>; see 29 CFR 1910.1026

REL Long-term value: 0.0002 mg/m<sup>3</sup>  
 as Cr; See Pocket Guide Apps. A and C

TLV Short-term value: 0.0005 mg/m<sup>3</sup>  
 Long-term value: 0.0002 mg/m<sup>3</sup>  
 as Cr(VI); inhalable, Skin; BEI, DSEN, RSEN

(Contd. on page 4)

US

# Safety Data Sheet

acc. to OSHA HCS

Printing date 07/09/2024

Reviewed on 07/08/2024

Trade name: Cesium chromate

(Contd. of page 3)

· **Ingredients with biological limit values:**

**13454-78-9 Cesium chromate**

|     |   |
|-----|---|
| BEI | 25 µg/L<br>Medium: urine<br>Time: end of shift at end of workweek<br>Parameter: Total chromium (fume) |
|     | 10 µg/L<br>Medium: urine<br>Time: increase during shift<br>Parameter: Total chromium (fume)           |

· **Additional information:** The lists that were valid during the creation were used as basis.

· **Exposure controls**

· **Personal protective equipment:**

· **General protective and hygienic measures:**

Keep away from foodstuffs, beverages and feed.  
Immediately remove all soiled and contaminated clothing.  
Wash hands before breaks and at the end of work.  
Store protective clothing separately.

· **Breathing equipment:**

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.

· **Protection of hands:**

Protective gloves  
The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.  
Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.  
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· **Material of gloves**

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

· **Penetration time of glove material**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· **Eye protection:** Tightly sealed goggles

## 9 Physical and chemical properties

· **Information on basic physical and chemical properties**

· **General Information**

· **Appearance:**

|                        |                 |
|------------------------|-----------------|
| <b>Form:</b>           | Powder          |
| <b>Color:</b>          | Not determined. |
| <b>Odor:</b>           | Characteristic  |
| <b>Odor threshold:</b> | Not determined. |

· **pH-value:** Not applicable.

· **Change in condition**

|                                     |              |
|-------------------------------------|--------------|
| <b>Melting point/Melting range:</b> | Undetermined |
| <b>Boiling point/Boiling range:</b> | Undetermined |

(Contd. on page 5)

# Safety Data Sheet

acc. to OSHA HCS

Printing date 07/09/2024

Reviewed on 07/08/2024

Trade name: Cesium chromate

(Contd. of page 4)

|   |   |
|---|---|
| · <b>Flash point:</b>                             | Not applicable.                               |
| · <b>Flammability (solid, gaseous):</b>           | Product is not flammable.                     |
| · <b>Decomposition temperature:</b>               | Not determined.                               |
| · <b>Auto igniting:</b>                           | Not determined.                               |
| · <b>Danger of explosion:</b>                     | Product does not present an explosion hazard. |
| · <b>Explosion limits:</b>                        |   |
| <b>Lower:</b>                                     | Not determined.                               |
| <b>Upper:</b>                                     | Not determined.                               |
| · <b>Vapor pressure:</b>                          | Not applicable.                               |
| · <b>Density at 20 °C (68 °F):</b>                | 4.237 g/cm <sup>3</sup> (35.35777 lbs/gal)    |
| · <b>Relative density</b>                         | Not determined.                               |
| · <b>Vapor density</b>                            | Not applicable.                               |
| · <b>Evaporation rate</b>                         | Not applicable.                               |
| · <b>Solubility in / Miscibility with Water:</b>  | Insoluble.                                    |
| · <b>Partition coefficient (n-octanol/water):</b> | Not determined.                               |
| · <b>Viscosity:</b>                               |   |
| <b>Dynamic:</b>                                   | Not applicable.                               |
| <b>Kinematic:</b>                                 | Not applicable.                               |
| <b>VOC content:</b>                               | 0.00 %  |
| <b>Solids content:</b>                            | 100.0 %                                       |
| · <b>Other information</b>                        | No further relevant information available.    |

## 10 Stability and reactivity

- **Reactivity** No further relevant information available.
- **Chemical stability**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Possibility of hazardous reactions** No dangerous reactions known.
- **Conditions to avoid** No further relevant information available.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:** No dangerous decomposition products known.

## 11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity:**
- **Primary irritant effect:**
- **on the skin:** No irritant effect.
- **on the eye:** No irritating effect.
- **Sensitization:** Sensitization possible through skin contact.

(Contd. on page 6)

US

# Safety Data Sheet

acc. to OSHA HCS

Printing date 07/09/2024

Reviewed on 07/08/2024

Trade name: Cesium chromate

(Contd. of page 5)

- **Additional toxicological information:**

- **Carcinogenic categories**

- **IARC (International Agency for Research on Cancer)**

I

- **NTP (National Toxicology Program)**

K

- **OSHA-Ca (Occupational Safety & Health Administration)**

Substance is not listed.

## 12 Ecological information

- **Toxicity**

- **Aquatic toxicity:** No further relevant information available.

- **Persistence and degradability** No further relevant information available.

- **Behavior in environmental systems:**

- **Bioaccumulative potential** No further relevant information available.

- **Mobility in soil** No further relevant information available.

- **Additional ecological information:**

- **General notes:**

Water hazard class 2 (Self-assessment): hazardous for water

Do not allow product to reach ground water, water course or sewage system.

Danger to drinking water if even small quantities leak into the ground.

- **Results of PBT and vPvB assessment**

- **PBT:** Not applicable.

- **vPvB:** Not applicable.

- **Other adverse effects** No further relevant information available.

## 13 Disposal considerations

- **Waste treatment methods**

- **Recommendation:**

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

- **Uncleaned packagings:**

- **Recommendation:** Disposal must be made according to official regulations.

## 14 Transport information

- **UN-Number**

- **DOT, IMDG, IATA**

UN3087

- **UN proper shipping name**

- **DOT**

Oxidizing solid, toxic, n.o.s. (Cesium chromate)

- **IMDG, IATA**

OXIDIZING SOLID, TOXIC, N.O.S. (Cesium chromate)

- **Transport hazard class(es)**

- **DOT**

- **Class**

5.1 Oxidizing substances

- **Label**

5.1, 6.1

(Contd. on page 7)

# Safety Data Sheet

acc. to OSHA HCS

Printing date 07/09/2024

Reviewed on 07/08/2024

Trade name: Cesium chromate

(Contd. of page 6)

|  |   |
|--|---|
| · <b>IMDG</b>  |   |
| · <b>Class</b>   | 5.1 Oxidizing substances  |
| · <b>Label</b>   | 5.1/6.1   |
| <hr style="border-top: 1px dashed black;"/>                                      |   |
| · <b>IATA</b>  |   |
| · <b>Class</b>   | 5.1 Oxidizing substances  |
| · <b>Label</b>   | 5.1 (6.1)   |
| · <b>Packing group</b>   |   |
| · <b>DOT, IMDG, IATA</b>   | III   |
| · <b>Environmental hazards:</b>  |   |
| · <b>Marine pollutant:</b>   | No  |
| · <b>Special precautions for user</b>  | Warning: Oxidizing substances   |
| · <b>Stowage Category</b>  | B   |
| · <b>Segregation Code</b>  | SG38 Stow "separated from" SGG2-ammonium compounds.<br>SG49 Stow "separated from" SGG6-cyanides<br>SG60 Stow "separated from" SGG16-peroxides |
| · <b>Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code</b> | Not applicable.   |
| · <b>Transport/Additional information:</b>                                       |   |
| · <b>DOT</b>   |   |
| · <b>Quantity limitations</b>  | On passenger aircraft/rail: 25 kg<br>On cargo aircraft only: 100 kg   |
| <hr style="border-top: 1px dashed black;"/>                                      |   |
| · <b>IMDG</b>  |   |
| · <b>Limited quantities (LQ)</b>   | 5 kg  |
| · <b>Excepted quantities (EQ)</b>  | Code: E1<br>Maximum net quantity per inner packaging: 30 g<br>Maximum net quantity per outer packaging: 1000 g                                |
| · <b>UN "Model Regulation":</b>  | UN 3087 OXIDIZING SOLID, TOXIC, N.O.S. (CESIUM CHROMATE), 5.1 (6.1), III, ENVIRONMENTALLY HAZARDOUS   |

## 15 Regulatory information

|   |                          |
|---|--------------------------|
| · <b>Safety, health and environmental regulations/legislation specific for the substance or mixture</b> |                          |
| · <b>Sara</b>   |                          |
| · <b>Section 355 (extremely hazardous substances):</b>  | Substance is not listed. |
| · <b>Section 313 (Specific toxic chemical listings):</b>  | Substance is listed.     |
| · <b>TSCA (Toxic Substances Control Act):</b>   | ACTIVE                   |
| · <b>Hazardous Air Pollutants</b>   | Substance is listed.     |
| · <b>Proposition 65</b>   |                          |
| · <b>Chemicals known to cause cancer:</b>   | Substance is listed.     |

(Contd. on page 8)

# Safety Data Sheet

acc. to OSHA HCS

Printing date 07/09/2024

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Trade name: Cesium chromate

(Contd. of page 7)

· **Chemicals known to cause reproductive toxicity for females:**

Substance is listed.

· **Chemicals known to cause reproductive toxicity for males:**

Substance is listed.

· **Chemicals known to cause developmental toxicity:**

Substance is listed.

· **Carcinogenic categories**

· **EPA (Environmental Protection Agency)**

A(inh), D(oral), K/L(inh), CBD(oral)

· **TLV (Threshold Limit Value)**

AI

· **NIOSH-Ca (National Institute for Occupational Safety and Health)**

Substance is listed.

· **RTECS**

Substance is not listed.

· **National regulations:**

· **Additional classification according to Decree on Hazardous Materials:**

Carcinogenic hazardous material group I (extremely dangerous).

Carcinogenic hazardous material group II (very dangerous).

Carcinogenic hazardous material group III (dangerous).

· **Information about limitation of use:**

Workers are not allowed to be exposed to this hazardous material. Exceptions can be made by the authorities in certain cases.

· **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

## 16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· **NFPA ratings (scale 0-4)**

Health = 0

Fire = 3

Reactivity = 0

The substance possesses oxidizing properties.

· **HMIS ratings (scale 0-4)**

Health = \*0

Fire = 3

Reactivity = 0

· **Department issuing SDS:** Technical Support Department

· **Contact:** Technical Support Department

· **Date of preparation / last revision** 07/09/2024 / -

· **Abbreviations and acronyms:**

ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

EINECS: European Inventory of Existing Commercial Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

(Contd. on page 9)

**Safety Data Sheet**  
**acc. to OSHA HCS**

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**Trade name: Cesium chromate**

(Contd. of page 8)

*VOC: Volatile Organic Compounds (USA, EU)*  
*PBT: Persistent, Bioaccumulative and Toxic*  
*vPvB: very Persistent and very Bioaccumulative*  
*NIOSH: National Institute for Occupational Safety*  
*OSHA: Occupational Safety & Health*  
*TLV: Threshold Limit Value*  
*PEL: Permissible Exposure Limit*  
*REL: Recommended Exposure Limit*  
*BEI: Biological Exposure Limit*  
*Skin Sens. 1: Skin sensitisation – Category 1*  
*Carc. 1A: Carcinogenicity – Category 1A*

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