

1. PRODUCT AND COMPANY IDENTIFICATION

| | |
|-------------------------------|--|
| Product name | Chromium Potassium Sulfate |
| Manufacturer | Sentury Reagents, Inc. 2515 Commerce Dr. Rock Hill, SC 29730 |
| Telephone | 803-327-6880 |
| Fax | 803-327-3872 |
| Emergency Phone # and Account | Chemtrec 800-424-9300 19961 |

2. HAZARDS IDENTIFICATION

Emergency Overview

OSHA Hazardous

No Known OSHA hazards



Signal Words: Warning

Classification

Acute toxicity, Oral (Category 5)

Hazard statement(s)

H303 May be harmful if swallowed

Precautionary statement(s)

P312 Call a poison control center/doctor if you feel unwell

HMIS Classification

Health hazard: 1
Fire: 0
Physical hazards: 0
Personal protection B

NFPA Rating

Health hazard: 0
Fire: 0
Reactivity Hazard: 0

Potential Health Effects

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

3. COMPOSITION/INFORMATION ON INGREDIENTS

| | | |
|------------------|---|---|
| Synonyms | : | Potassium chromium(III) sulfatedodecahydrate Chrome alum |
| Formula | : | CrK ₂ O ₈ S ₂ · 12H ₂ O |
| Molecular Weight | : | 499.40 g/mol |

| Component | Concentration |
|---|---------------|
| Chromium potassium bis(sulphate) dodecahydrate | |
| CAS-No. | 7788-99-0 |
| EC-No. | 233-401-6 |

4. 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.

5. FIRE-FIGHTING MEASURES

Conditions of flammability

Not flammable or combustible.

Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Special protective equipment for firefighters

Wear self contained breathing apparatus for fire fighting if necessary.

Hazardous combustion products

Hazardous decomposition products formed under fire conditions. - Sulphur oxides, Potassium oxides, Chromium oxides

6. ACCIDENTAL RELEASE MEASURES

Personal precautions

Use personal protective equipment. Avoid dust formation. Avoid breathing vapors, mist or gas. Avoid breathing dust.

Environmental precautions

Do not let product enter drains.

Methods and materials for containment and cleaning up

Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

7. HANDLING AND STORAGE

Precautions for safe handling

Avoid formation of dust and aerosols.

Provide appropriate exhaust ventilation at places where dust is formed.

Conditions for safe storage

Keep container tightly closed in a dry and well-ventilated place.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

| Components | CAS-No. | Value | Control parameters | Basis |
|--|---|-------|-----------------------|--|
| Chromium potassium bis(sulphate) dodecahydrate | 7788-99-0 | TWA | 0.5 mg/m ³ | USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants |
| | | TWA | 0.5 mg/m ³ | USA. ACGIH Threshold Limit Values (TLV) |
| Remarks | Upper Respiratory Tract & skin irritation Not classifiable as a human carcinogen varies | | | |
| | | TWA | 0.5 mg/m ³ | USA. NIOSH Recommended Exposure Limits |
| | Chromium(III) compounds include soluble chromic salts. See Appendix C | | | |

Personal protective equipment

Respiratory protection

Respiratory protection is not required. Where protection from nuisance levels of dusts are desired, use type N95 (US) or type P1 (EN 143) dust masks. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Hand 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.

Eye protection

Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin and body protection

Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Hygiene measures

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance

| | |
|--------|-------------|
| Form | crystalline |
| Colour | dark violet |

Safety data

| | |
|--|---|
| pH | no data available |
| Melting/ freezing point | Melting pt/range: 89 °C (192 °F) – lit. |
| Boiling point | no data available |
| Flash point | not applicable |
| Ignition temp | no data available |
| Auto-ignition temp | no data available |
| Lower/Upper explosion limit | no data available |
| Vapour pressure | no data available |
| Density | 1.830 g/cm ³ |
| Water solubility | soluble |
| Partition coefficient: n-octanol /water | no data available |
| Relative vapor density | no data available |
| Odour | Odourless |
| Odour Threshold | no data available |
| Evaporation Rate | no data available |

10. STABILITY AND REACTIVITY

Chemical stability

Stable under recommended storage conditions.

Possibility of hazardous reactions

No data available

Conditions to avoid

No data available

Materials to avoid

Strong oxidizing agents

Hazardous decomposition products

Hazardous decomposition products formed under fire conditions. Sulphur oxides, Potassium oxides, Chromium oxides.

11. TOXICOLOGICAL INFORMATION

Acute toxicity Oral LD50

LD50 Oral - rat - 3,530 mg/kg
Remarks: anhydrous substance

Inhalation LC50

no data available

Dermal LD50

no data available

Other information on acute toxicity

LD50 Intravenous - rat - 112 mg/kg

Skin corrosion/irritation

no data available

Serious eye damage/eye irritation

no data available

Respiratory or skin sensitization

no data available

Germ cell mutagenicity

no data available

Carcinogenicity

Carcinogenicity – rat – Subcutaneous

Tumorigenic: Equivocal tumorigenic agent by RTECS criteria. Tumorigenic: Tumors at site or application.

IARC: 3 – Group 3: Not classifiable as to its carcinogenicity to humans (Chromium potassium bis(sulphate) dodecahydrate)

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by OSHA.

Reproductive toxicity

No data available

Teratogenicity

No data available

Specific target organ toxicity – single exposure (Globally Harmonized System)

No data available

Specific target organ toxicity – repeated exposure (Globally Harmonized System)

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

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Synergistic effects

No data available

Additoinal Information

RTECS: GB6850000

12. ECOLOGICAL INFORMATION

Toxicity

no data available

Persistence and degradability

no data available

Bioaccumulative potential

no data available

Mobility in soil

no data available

PBT and vPvB assessment

no data available

Other adverse effects

no data available

13. DISPOSAL CONSIDERATIONS**Product**

Offer surplus and non-recyclable solutions to a licensed disposal company.

Contaminated packaging

Dispose of as unused product.

14. TRANSPORT INFORMATION**DOT (US)** Not dangerous goods**IMDG** Not dangerous goods**IATA** Not dangerous goods**15. REGULATORY INFORMATION****OSHA Hazards**

No known OSHA hazards

SARA 302 Components

SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302. This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

SARA 313 Components

The following components are subject to reporting levels established by SARA Title III, Section 313:

| | CAS No. | Revision Date |
|--|-----------|---------------|
| Chromium potassium bis(sulphate) dodecahydrate | 7788-99-0 | 1993-04-24 |

Sara 311/312 Hazards

No SARA Hazards

Massachusetts Right To Know Components

| | | |
|--|-----------|------------|
| Chromium potassium bis(sulphate) dodecahydrate | 7788-99-0 | 1993-04-24 |
|--|-----------|------------|

Pennsylvania Right To Know Components

| | | |
|--|-----------|------------|
| Chromium potassium bis(sulphate) dodecahydrate | 7788-99-0 | 1993-04-24 |
|--|-----------|------------|

New Jersey Right To Know Components

| | | |
|--|-----------|------------|
| Chromium potassium bis(sulphate) dodecahydrate | 7788-99-0 | 1993-04-24 |
|--|-----------|------------|

California Prop. 65 Components

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

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 in this document is based on the present 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. Sentury Reagents, Inc., shall not be held liable for any damage resulting from handling or from contact with the above product.