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**** MATERIAL SAFETY DATA SHEET ****

Chromium (III) Potassium Sulfate Dodecahydrate

**** SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION ****

MSDS Name: Chromium (III) Potassium Sulfate Dodecahydrate Catalog Numbers:

\$72229C, \$72229F, \$79967, C337 500, C337-500, C337500, \$76786 Synonyms:

Chromium (III) Potassium sulfate, dodecadrate; Chromic Alum (Dodecahydrate); Potassium Chromium Alum Dodecahydrate.

Company Identification: Fisher Scientific

1 Reagent Lane Fairlawn, NJ (

For information, call: 201-796-7100 Emergency Number: 201-796-7100 For Internation, call: 201-790-7100 Emergency Number: 201-796-7100 For CHEMTREC assistance, call: 800-424-9300 For International CHEMTREC assistance, call: 703-527-3887

**** SECTION 2 - COMPOSITION, INFORMATION ON INGREDIENTS ****

CAS# Chemical Name 7788-99-0 |Chromium (III) Potassium Sulfate Dodec | 100 unlisted

> Hazard Symbols: XI Risk Phrases: 36/38

> > **** SECTION 3 - HAZARDS IDENTIFICATION ****

EMERGENCY OVERVIEW

Appearance: grey crystals. Warning! May cause allergic respiratory reaction. May cause allergic skin reaction. May cause eye and skin irritation. May cause respiratory and digestive tract irritation. Target Organs: Lungs.

Potential Health Effects

Eye:

Causes eye irritation.

Causes skin irritation. May cause skin sensitization, an allergic reaction, which becomes evident upon re-exposure to this material. Ingestion:

No hazard expected in normal industrial use.

Inhalation:

Dust is irritating to the respiratory tract. Causes irritation of mucous membrane.

Prolonged or repeated skin contact may cause defatting and

dermatitis.

**** SECTION 4 - FIRST AID MEASURES ****

Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid immediately

Skin:

Get medical aid. Flush skin with plenty of soap and water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse.

Ingestion:

If victim is conscious and alert, give 2-4 cupfuls of milk or water. Never give anything by mouth to an unconscious person. Get medical aid immediately.

Inhalation:

Remove from exposure to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid.

Notes to Physician:

Treat symptomatically and Antidote:

None reported.

**** SECTION 5 - FIRE FIGHTING MEASURES ****

General Information:

As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. Extinguishing Media:

Substance is noncombustible; use agent most appropriate to extinguish surrounding fire.

Autoignition Temperature: Not applicable.

6,855

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Flash Point: Explosion Limits, lower: Not available. Explosion Limits, upper: Not available.

NFPA Rating: (estimated) Health: 1; Flammability: 0; Instability: 0

**** SECTION 6 - ACCIDENTAL RELEASE MEASURES ****

General Information: Use proper personal protective equipment as indicated in Section 8. Spills/Leaks:

Vacuum or sweep up material and place into a suitable disposal container. Avoid generating dusty conditions. Provide ventilation.

**** SECTION 7 - HANDLING and STORAGE ****

Handling: wash thoroughly after handling. Use only in a well-ventilated area. Avoid contact with eyes, skin, and clothing. Keep container tightly closed. Avoid ingestion and inhalation. Storage:

Store in a tightly closed container. Store in a cool, dry, well-ventilated area away from incompatible substances. Keep containers tightly closed.

**** SECTION 8 - EXPOSURE CONTROLS, PERSONAL PROTECTION ****

Engineering Controls: Use adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits.

Exposure Limits

4	Chemical Name	ACGIH	NIOSH	OSHA - Final PELs
	Chromium (III) Pota ssium Sulfate Dodec ahydrate	(listed under ** no name **).	0.5 mg/m3 TWA (listed under ** no name **).250 mg/m3 IDLH (listed under ** no name **).	1 mg/m3 TWA (listed under ** no name **).

OSHA Vacated PELs: Chromium (III) Potassium Sulfate Dodecahydrate: 1 mg/m3 TWA (listed under ** no name **)

Personal Protective Equipment

Eves:

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:

Wear appropriate protective gloves to prevent skin exposure.

Clothing:

Wear appropriate protective clothing to minimize contact with skin.

Respirators:

Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Always use a NIOSH or European Standard EN 149 approved respirator when necessary.

**** SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES ****

Crystals purple - grey none reported Physical State: Color: Odor: nH: Not available Vapor Pressure: Not available Vapor Density: Not available. Evaporation Rate: Not available Viscosity:
Boiling Point:
Freezing/Melting Point: Not available. 752 deg F 192 deg F Not available Decomposition Temperature: Solubility in water: 19.6 % in water Specific Gravity/Density: 1.8 Molecular Formula: CrKSS208.12H20 Molecular Weight: 556.9495

**** SECTION 10 - STABILITY AND REACTIVITY ****

Chemical Stability: Stable under normal temperatures and pressures. Conditions to Avoid: Incompatible materials, excess heat.

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      Incompatibilities with Other Materials:
     Strong oxidizing agents, heat.
Hazardous Decomposition Products:
            Oxides of sulfur, chromium fumes.
      Hazardous Polymerization: Has not been reported
                   *** SECTION 11 - TOXICOLOGICAL INFORMATION ***
      RTECS#:
            CAS# 7788-99-0: GB6850000
      LD50/LC50:
            Not available
      Carcinogenicity:
        Chromium (III) Potassium Sulfate Dodecahydrate -
                  ACGIH: A4 - Not Classifiable as a Human Carcinogen (listed as ** IARC: Group 3 carcinogen (listed as ** undefined **).
      Epidemiology:
            No information available.
      Teratogenicity:
            No information available.
      Reproductive Effects:
            No information available.
      Neurotoxicity:
            No information available.
      Mutagenicity:
            Mutation data reported.
      Other Studies:
            Experimental tumorigenic dtat reported.
                      **** SECTION 12 -- ECOLOGICAL INFORMATION ****
                     **** SECTION 13 - DISPOSAL CONSIDERATIONS ****
Chemical waste generators must determine whether a discarded chemical
is classified as a hazardous waste.
US EPA guidelines for the classification determination are listed in
40 CFR Parts 261.3. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate
classification.
RCRA P-Series: None listed.
RCRA U-Series: None listed.
                      **** SECTION 14 - TRANSPORT INFORMATION ****
      US DOT
            No information available
      Canadian TDG
            No information available.
                      **** SECTION 15 - REGULATORY INFORMATION ****
 US FEDERAL
      TSCA
            CAS# 7788-99-0 is not on the TSCA Inventory because it is a hydrate. It is considered to be listed if the CAS number for the anhydrous form is on the inventory (40CFR720.3(u)(2)).
          Health & Safety Reporting List
None of the chemicals are on the Health & Safety Reporting List.
          Chemical Test Rules
             None of the chemicals in this product are under a Chemical Test Rule.
          Section 12b
             None of the chemicals are listed under TSCA Section 12b.
          TSCA Significant New Use Rule
None of the chemicals in this material have a SNUR under TSCA.
          CERCLA Hazardous Substances and corresponding RQs
            None of the chemicals in this material have an RQ.
          SARA Section 302 Extremely Hazardous Substances
None of the chemicals in this product have a TPQ.
          SARA Codes
            CAS # 7788-99-0: acute, chronic.
          Section 313
             This material contains Chromium (III) Potassium Sulfate Dodecahydrate (listed as ** undefined **), 100%, (CAS# 7788-99-0) which is subject to the reporting requirements of Section 313 of SARA Title III and
             40 CFR Part 372.
      Clean Air Act:
             This material does not contain any hazardous air pollutants.
             This material does not contain any Class 1 Ozone depletors. This material does not contain any Class 2 Ozone depletors.
       Clean Water Act:
             None of the chemicals in this product are listed as Hazardous
             Substances under the CWA.
             CAS# 7788-99-0 is listed as a Priority Pollutant under the Clean
             Water Act.
             CAS# 7788-99-0 is listed as a Toxic Pollutant under the Clean Water
                                                                                                     6.857
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             None of the chemicals in this product are considered highly hazardous
             by OSHA.
STATE
     Chromium (III) Potassium Sulfa can be found on the following state right to know lists: California, (listed as ** no name **), New Jersey, (listed as ** no name **), Florida, (listed as ** no name **), Pennsylvania, (listed as ** no name **), Minnesota, (listed as ** no name **), Massachusetts, (listed as ** no name **).
      California No Significant Risk Level:
None of the chemicals in this product are listed. European/International Regulations
      European Labeling in Accordance with EC Directives
             Hazard Symbols: XI
             Risk Phrases:
                                 R 36/38 Irritating to eyes and skin.
             Safety Phrases:
                                 as:
5:26 In case of contact with eyes, rinse immediately
with plenty of water and seek medical advice.
5:28 After contact with skin, wash immediately
                                  with.
   WGK (Water Danger/Protection)
              CAS# 7788-99-0: No information available.
   United Kingdom Occupational Exposure Limits
CAS# 7788-99-0: OES-United Kingdom, TWA (listed as ** undefined
              **): 0.5 mg/m3 TWA
   United Kingdom Maximum Exposure Limits
   Canada
             None of the chemicals in this product are listed on the DSL/NDSL list. This product has a WHMIS classification of D2B. CAS# 7788-99-0 is not listed on Canada's Ingredient Disclosure List.
              CAS# 7788-99-0 (listed as ** undefined **): OEL-ARAB Republic of Egypt
              :TWA 0.05 mg/m3
OEL-AUSTRALIA:TWA 0.05 mg/m3
OEL-BELGIUM:TWA 0.5 mg/m3
              OEL-DENMARK: TWA 0.5 mg/m3
              OFT-FINLAND: TWA 0.01 mg/m3
              OEL-FRANCE:TWA 0.5 mg/m3
              OEL-JAPAN: TWA 0.5 mg/m3
              OEL-THE NETHERLANDS:TWA 0.5 mg/m3
              OEL-THE PHILIPPINES: TWA 1 mg/m3
              OEL-SWEDEN: TWA 0.5 mg/m3
OEL-UNITED KINGDOM: TWA 0.5 mg/m3
              OEL IN BULGARIA, COLOMBIA, JORDAN, KOREA Check ACGIH TLV
OEL IN NEW ZEALAND, SINGAPORE, VIETNAM Check ACGI TLV
                           **** SECTION 16 - ADDITIONAL INFORMATION ****
       MSDS Creation Date: 11/04/1998 Revision #2 Date: 8/02/2000
       The information above is believed to be accurate and represents the best
      information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to
       such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the
       information for their particular purposes. In no way shall the company be
       liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if the company has been advised of
       the possibility of such damages.
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