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# SAFETY DATA SHEET

Revision Date 24-Jul-2015

Version 1

## 1. IDENTIFICATION

**Product Name** Sodium Dichromate, Dihydrate  
**Product Code** 8290  
**CAS No.** 7789-12-0  
**Chemical Formula** Na<sub>2</sub>Cr<sub>2</sub>O<sub>7</sub>·2H<sub>2</sub>O  
**Recommended Use** For laboratory, scientific, R&D or manufacturing use.  
**Company** E K Industries, Inc.  
1403 Herkimer St.  
Joliet, IL 60432  
Tel. (800) 283-4244  
**Emergency Telephone** Call CHEMTREC 1-800-424-9300 (EKI CCN 7453)

## 2. HAZARDS IDENTIFICATION

### Classification

#### **OSHA Regulatory Status**

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

|  |             |
|--|-------------|
| Acute toxicity - Oral                              | Category 2  |
| Acute toxicity - Dermal                            | Category 3  |
| Acute toxicity - Inhalation (Dusts/Mists)          | Category 2  |
| Skin corrosion/irritation                          | Category 1  |
| Serious eye damage/eye irritation                  | Category 1  |
| Respiratory sensitization                          | Category 1  |
| Skin sensitization                                 | Category 1  |
| Germ cell mutagenicity                             | Category 1B |
| Carcinogenicity                                    | Category 1A |
| Reproductive toxicity                              | Category 1B |
| Specific target organ toxicity (single exposure)   | Category 3  |
| Specific target organ toxicity (repeated exposure) | Category 1  |
| Oxidizing solids                                   | Category 2  |
| Corrosive to metals                                | Category 1  |

### Label elements

#### **Signal word**

Danger

#### **Hazard statements**

Fatal if swallowed. Toxic in contact with skin. Fatal if inhaled. Causes severe skin burns and eye damage. May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause an allergic skin reaction. May cause genetic defects. May cause cancer. May damage fertility or the unborn child. May cause respiratory irritation. May cause drowsiness or dizziness. Causes damage to organs through prolonged or repeated exposure.

May intensify fire; oxidizer.

May be corrosive to metals.

**Precautionary Statements - Prevention**

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use personal protective equipment as required. Wash face, hands and any exposed skin thoroughly after handling. Do not eat, drink or smoke when using this product. Do not breathe dust/fume/gas/mist/vapors/spray. Use only outdoors or in a well-ventilated area. Wear respiratory protection. In case of inadequate ventilation wear respiratory protection. Contaminated work clothing should not be allowed out of the workplace. Wear protective gloves. Keep away from heat/sparks/open flames/hot surfaces. — No smoking. Keep/Store away from clothing/ combustible materials. Take any precaution to avoid mixing with combustibles. Keep only in original container.

**Precautionary Statements - Response**

Immediately call a POISON CENTER or doctor/physician.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/physician.

Call a POISON CENTER or doctor/physician if you feel unwell. Wash contaminated clothing before reuse. IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. If skin irritation or rash occurs: Get medical advice/attention.

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or doctor/physician. Call a POISON CENTER or doctor/physician if you feel unwell.

IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. Rinse mouth. Do NOT induce vomiting.

In case of fire: Use CO<sub>2</sub>, dry chemical, or foam for extinction.

Absorb spillage to prevent material damage.

**Precautionary Statements - Storage**

Store locked up. Store in a well-ventilated place. Keep container tightly closed. Store in original container or other corrosive resistant container.

**Precautionary Statements - Disposal**

Dispose of contents/container to an approved waste disposal plant.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

| Chemical Name                | CAS No.   | Weight-% |
|------------------------------|-----------|----------|
| Sodium dichromate, dihydrate | 7789-12-0 | >99      |

### 4. FIRST AID MEASURES

**Description of first aid measures**

|                     |   |
|---------------------|---|
| <b>Eye contact</b>  | Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Immediate medical attention is required. |
| <b>Skin contact</b> | Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Immediate medical attention is required.                      |
| <b>Inhalation</b>   | Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get immediate medical attention.                                      |

**Ingestion** Do NOT induce vomiting unless instructed to do so by medical personnel. If conscious, rinse mouth and give several glasses of water to drink. Never give anything by mouth to an unconscious person. Get immediate medical attention.

**Most important symptoms and effects, both acute and delayed**

**Symptoms** Causes severe skin burns and eye damage. May cause damage to organs, cancer, or genetic defects. May cause allergy or asthma symptoms or breathing difficulties if inhaled.

## 5. FIRE-FIGHTING MEASURES

**Suitable extinguishing media**

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment Flood fire area with water from a distance

**Specific hazards arising from the chemical**

Some are oxidizers and may ignite combustibles (wood, paper, oil, clothing, etc.). Thermal decomposition can lead to release of irritating and toxic gases and vapors.

**Hazardous combustion products** Sodium oxides. Chromium oxides.

**Protective equipment and precautions for firefighters**

Firefighters should wear self-contained breathing apparatus with full facepiece operated in pressure-demand or other positive pressure mode.

**NFPA** Health hazards 3 Flammability 0 Instability 1 Physical and Chemical Properties OX

## 6. ACCIDENTAL RELEASE MEASURES

**Personal precautions, protective equipment and emergency procedures**

**Personal precautions** Use personal protective equipment as required. Evacuate personnel to safe areas. Ensure adequate ventilation, especially in confined areas.

**Environmental precautions** Prevent entry into waterways, sewers, basements or confined areas.

**Methods and material for containment and cleaning up**

**Methods for containment** Prevent further leakage or spillage if safe to do so.

**Methods for cleaning up** Pick up and transfer to properly labeled containers.

## 7. HANDLING AND STORAGE

**Precautions for safe handling** Use personal protective equipment as required  
Handle in accordance with good industrial hygiene and safety practice.

**Storage Conditions** Keep containers tightly closed in a dry, cool and well-ventilated place.

**Incompatible materials** Strong oxidizing agents.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Occupational exposure limits**

| Chemical Name                             | ACGIH TLV                      | OSHA PEL  | NIOSH IDLH  |
|---|--------------------------------|---|---|
| Sodium dichromate, dihydrate<br>7789-12-0 | TWA: 0.05 mg/m <sup>3</sup> Cr | TWA: 5 µg/m <sup>3</sup><br>(vacated) Ceiling: 0.1 mg/m <sup>3</sup><br>Ceiling: 0.1 mg/m <sup>3</sup> CrO <sub>3</sub> applies to<br>any operations or sectors for which | IDLH: 15 mg/m <sup>3</sup> Cr(VI)<br>TWA: 0.0002 mg/m <sup>3</sup> Cr |

|  |  |   |  |
|--|--|---|--|
|  |  | the Hexavalent Chromium standard [29 CFR 1910.1026] is stayed or is otherwise not in effect |  |
|--|--|---|--|

**Appropriate engineering controls**

**Engineering Controls** Emergency showers, eyewash stations, ventilation systems.

**Individual protection measures, such as personal protective equipment**

- Eye/face protection** Wear safety glasses with side shields (or goggles).
- Skin and body protection** Wear protective gloves and protective clothing.
- Respiratory protection** If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

**General Hygiene Considerations** Handle in accordance with good industrial hygiene and safety practice.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

**Information on basic physical and chemical properties**

|                                       |                          |
|---------------------------------------|--------------------------|
| <b>Physical state</b>                 | Solid                    |
| <b>Appearance</b>                     | Orange - Red Crystals    |
| <b>Odor</b>                           | Odorless                 |
| <b>Odor threshold</b>                 | No information available |
| <b>pH</b>                             | No information available |
| <b>Melting point / freezing point</b> | 91 C                     |
| <b>Boiling point / boiling range</b>  | 400 C                    |
| <b>Flash point</b>                    | No information available |
| <b>Evaporation rate</b>               | No information available |
| <b>Flammability (solid, gas)</b>      | No information available |
| <b>Flammability Limit in Air</b>      |                          |
| <b>Upper flammability limit:</b>      | No information available |
| <b>Lower flammability limit:</b>      | No information available |
| <b>Vapor pressure</b>                 | No information available |
| <b>Vapor density</b>                  | No information available |
| <b>Relative density</b>               | No information available |
| <b>Water solubility</b>               | Partially soluble        |
| <b>Solubility in other solvents</b>   | No information available |
| <b>Partition coefficient</b>          | No information available |
| <b>Autoignition temperature</b>       | No information available |
| <b>Decomposition temperature</b>      | No information available |
| <b>Kinematic viscosity</b>            | No information available |

## 10. STABILITY AND REACTIVITY

**Stability** Stable under recommended storage conditions.

**Possibility of Hazardous Reactions** None under normal processing.

**Conditions to avoid** Extremes of temperature and direct sunlight

**Incompatible materials** Strong oxidizing agents.

**Hazardous Decomposition Products** Sodium oxide. Chromium oxides.

## 11. TOXICOLOGICAL INFORMATION

### Information on likely routes of exposure

|                     |  |
|---------------------|--|
| <b>Inhalation</b>   | Toxic by inhalation.   |
| <b>Eye contact</b>  | Risk of serious damage to eyes.  |
| <b>Skin contact</b> | Contact causes severe skin irritation and burns. Repeated or prolonged skin contact may cause allergic reactions with susceptible persons. |
| <b>Ingestion</b>    | Toxic if swallowed.  |

### Information on toxicological effects

#### Delayed and immediate effects as well as chronic effects from short and long-term exposure

|  |   |
|--|---|
| <b>Skin corrosion/irritation</b>         | Causes burns.   |
| <b>Serious eye damage/eye irritation</b> | Risk of serious damage to eyes.   |
| <b>Sensitization</b>                     | May cause allergy or asthma symptoms or breathing difficulties if inhaled.              |
| <b>Germ cell mutagenicity</b>            | No information available.   |
| <b>Carcinogenicity</b>                   | The table below indicates whether each agency has listed any ingredient as a carcinogen |

| Chemical Name                             | ACGIH | IARC    | NTP   | OSHA |
|---|-------|---------|-------|------|
| Sodium dichromate, dihydrate<br>7789-12-0 | A1    | Group 1 | Known | X    |

#### **Legend**

ACGIH (American Conference of Governmental Industrial Hygienists)  
 A1 - Known Human Carcinogen  
 IARC (International Agency for Research on Cancer)  
 Group 1 - Carcinogenic to Humans  
 NTP (National Toxicology Program)  
 Known - Known Carcinogen  
 OSHA (Occupational Safety and Health Administration of the US Department of Labor)  
 X - Present

## 12. ECOLOGICAL INFORMATION

### Ecotoxicity

No information available

### Persistence and degradability

No information available.

### Bioaccumulation

No information available.

### Other adverse effects

No information available

## 13. DISPOSAL CONSIDERATIONS

### Waste treatment methods

|                               |   |
|-------------------------------|---|
| <b>Disposal of wastes</b>     | Disposal should be in accordance with applicable regional, national and local laws and regulations.                           |
| <b>Contaminated packaging</b> | Do not reuse container. Emptied containers may contain residue. Continue to follow label warnings after container is emptied. |

| Chemical Name                             | California Hazardous Waste Status |
|---|-----------------------------------|
| Sodium dichromate, dihydrate<br>7789-12-0 | Toxic<br>Corrosive<br>Ignitable   |

#### 14. TRANSPORT INFORMATION

Transportation information is provided as a general reference only and may not be applicable in all situations. This information applies to non-bulk shipments only. Per 49 CFR §173.22, it is the shipper's responsibility to ensure that all materials are properly packaged, classified and labeled prior to shipment.

##### DOT

|                             |   |
|-----------------------------|---|
| <b>UN/ID no.</b>            | 3288  |
| <b>Proper shipping name</b> | RQ, Toxic solid, inorganic, n.o.s., (sodium bichromate) |
| <b>Hazard Class</b>         | 6.1   |
| <b>Packing Group</b>        | III   |

##### IATA

|                             |   |
|-----------------------------|---|
| <b>UN/ID no.</b>            | 3288  |
| <b>Proper shipping name</b> | RQ, Toxic solid, inorganic, n.o.s., (sodium bichromate) |
| <b>Hazard Class</b>         | 6.1   |
| <b>Packing Group</b>        | III   |

#### 15. REGULATORY INFORMATION

##### US Federal Regulations

##### SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

| Chemical Name                            | SARA 313 - Threshold Values % |
|--|-------------------------------|
| Sodium dichromate, dihydrate - 7789-12-0 | 0.1                           |

##### SARA 311/312 Hazard Categories

|  |     |
|--|-----|
| <b>Acute health hazard</b>               | Yes |
| <b>Chronic Health Hazard</b>             | Yes |
| <b>Fire hazard</b>                       | Yes |
| <b>Sudden release of pressure hazard</b> | No  |
| <b>Reactive Hazard</b>                   | No  |

##### CWA (Clean Water Act)

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

| Chemical Name                             | CWA - Reportable Quantities | CWA - Toxic Pollutants | CWA - Priority Pollutants | CWA - Hazardous Substances |
|---|-----------------------------|------------------------|---------------------------|----------------------------|
| Sodium dichromate, dihydrate<br>7789-12-0 | -                           | X                      | -                         | -                          |

##### CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

##### US State Regulations

**California Proposition 65**

This product contains the following Proposition 65 chemicals

| Chemical Name                            | California Proposition 65   |
|--|---|
| Sodium dichromate, dihydrate - 7789-12-0 | Carcinogen<br>Developmental<br>Female Reproductive<br>Male Reproductive |

**U.S. State Right-to-Know Regulations**

| Chemical Name                             | New Jersey | Massachusetts | Pennsylvania |
|---|------------|---------------|--------------|
| Sodium dichromate, dihydrate<br>7789-12-0 | X          | -             | X            |

|                              |
|------------------------------|
| <b>16. OTHER INFORMATION</b> |
|------------------------------|

**Prepared By**

EKI Regulatory Affairs (Email: reg@eki-chem.com)

**Revision Date**

24-Jul-2015

**Disclaimer**

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**End of Safety Data Sheet**