

MATERIAL SAFETY DATA SHEET

ERA A Waters Company

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION


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Golden, CO, 80403 U.S.A. **CHEMICAL EMERGENCY PHONE:** 352-535-5053 (INFOTRAC)

Product Name(s): Hexavalent Chromium 1000 mg/L
Catalog / Part Number(s): 019, 973, 186004178
MSDS Creation Date: November 22, 2005
Revision Date: July 18, 2012 **MSDS Reference Number:** 019

SECTION 2: HAZARDS IDENTIFICATION

Toxic. Harmful by inhalation. May cause cancer. Risk of cancer depends on duration and level of exposure. The matrix of each standard is a K2Cr2O7/water mixture listed below which is classified as dangerous by Directive 199/45/EC. Use only as directed and in accordance with good laboratory practices.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

| CHEMICAL INGREDIENT NAME | CAS NUMBER | EC NUMBER | % BY WT. | EXPOSURE LIMITS | | EU LABEL |
|--------------------------|------------|-----------|----------|-----------------|------------|---|
| | | | | OSHA | ACGIH | HAZARD LABEL |
| Potassium dichromate | 7778-50-9 | 231-906-6 | ≤0.1 | 0.1 mg/m3 PEL | 0.05 mg/m3 |  |

Notes: This standard is 125 mL of a mixture containing potassium dichromate salt with the balance being ≥99.9% water. Hexavalent chromium is a known human carcinogen. Exposure Limits are 8-Hour TWA (Time Weighted Average) unless designated C (Ceiling) or STEL (Short Term Exposure Limit). Other components considered Non-Hazardous under OSHA 1910.1200 (HazCom) as they are not present in concentrations exceeding 1% (or 0.1% if considered a known or potential carcinogen). Material Use: Analytical reagent or certified reference material used in laboratories. Uses also include research and development.

SECTION 4: FIRST-AID MEASURES

Inhalation: Remove to fresh air.
Skin Contact: Flush with water.
Eye Contact: Immediately flush with water for a minimum of 15 minutes.
Ingestion: Get medical attention
After following first aid measures, seek medical attention.

SECTION 5: FIRE-FIGHTING MEASURES

Flammable Properties: Not flammable.
Extinguishing Media: Dry chemical, carbon dioxide or appropriate foam.
Unique Aspects Contributing To a Fire: None.
Special Fire Fighting Procedures: None.
Note: As in any fire, wear self-contained breathing apparatus, and full protective gear.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Absorb liquid with spill pillow or other absorbent. Ventilate and wash spill site after material pick up is complete. Place wastes into closed containers for proper disposal.

SECTION 7: HANDLING AND STORAGE

Handle in accordance with good laboratory practices. Store in a dry well-ventilated place. This product is intended for use only by people trained in the safety and handling of chemicals and laboratory preparations.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Handle in accordance with good laboratory practices. Wash thoroughly after handling.
Respiratory Protection: Not normally needed. If exposure limits are exceeded, use approved respirator.
Eye Protection: Safety glasses with side shields or safety goggles
Skin Protection: Neoprene or other chemical resistant gloves.
Engineering Controls: Not normally needed. If exposure limits are exceeded, work in a fume hood.

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SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

DATA FOR MATRIX:

| | | | | | |
|-----------------|-----------------|-------------------|----|------------------------|---------|
| Appearance: | Clear to yellow | Specific Gravity: | NA | Melting Point: | NA |
| Physical State: | Liquid | Flash Point: | NA | Vapor Pressure: | NA |
| Odor: | NA | Explosion Limits: | NA | Vapor Density (air=1): | NA |
| pH: | NA | Boiling Point: | NA | Solubility in Water: | Soluble |

SECTION 10: STABILITY AND REACTIVITY

Hazardous Polymerization Will Not Occur May Occur Stability: Stable Unstable
Hazardous Decomposition/Combustion Products: NA
Conditions and Materials to Avoid: Oxidizing agents.

SECTION 11: TOXICOLOGICAL INFORMATION

Primary Route(s) of Exposure Under Normal Use: Skin contact: may cause skin irritation or be harmful if absorbed through skin. Eye contact: may cause eye irritation. Inhalation: harmful if inhaled, may be irritation to mucous membranes and upper respiratory tract. Ingestion: harmful if swallowed.

Target Organ(s): Lungs, kidneys, blood.

Acute Effects: Harmful by inhalation. May cause sensitization by inhalation and skin contact. Ingestion can cause vomiting.

Potassium dichromate: Oral, child: LDLO=26 mg/kg; Oral, man: LDLO=143 mg/kg; Oral, rat:LD50=25 mg/kg; Skin, rabbit:LD50=14 mg/kg.

Chronic Effects: Carcinogen; Teratogen; May cause heritable genetic damage. Reproductive hazard; May impair fertility. May cause harm to the unborn child.

Other Information: Chemical Ingredient(s) potassium dichromate is classified as carcinogen(s) by OSHA, IARC (Group 1), NTP, ACGIH (A1), or California. California Prop-65: This product is or contains chemicals known to the state of California to cause cancer.

SECTION 12: ECOLOGICAL INFORMATION

Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment. Avoid release into the environment.

SECTION 13: DISPOSAL CONSIDERATIONS

To determine proper disposal, consult applicable federal, state and local environmental control regulations.

SECTION 14: TRANSPORT INFORMATION

Shipment Name/Type: Non-hazardous for transport.

UN Number: NA Shipping/Hazardous Class: NA Packing Group: NA

Shipping regulations are based on combinations of criteria such as quantity, class and packaging according to DOT, IATA and (49) CFR.

SECTION 15: REGULATORY INFORMATION

EU Symbol of Danger: Toxic (T) concentration ≤ 0.1 C $< 0.2\%$

EU Risk Phrases: May cause cancer [R45]; May cause heritable genetic damage [R46]; Harmful by inhalation [R20].

U.S. TSCA: Listed

Canada: This product has been classified according to the hazard criteria of the CPR and this MSDS contains all the information required by the CPR.

SECTION 16: OTHER INFORMATION

| | | | | |
|---|--------------|-----------|-----------------|--------------------|
| United States EPA Regulatory Information: | NFPA Rating: | Health: 3 | Flammability: 0 | Reactivity: 0 |
| SARA 313: Yes (0.1% de minimis) | HMIS Rating: | Health: 3 | Flammability: 0 | Physical Hazard: 0 |
| CERCLA RQ: 10 lbs | | | | |

NOTE: NA = Data not available, not established, determined or not pertinent.

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