

**MSDS****Material Safety Data Sheet**

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**Chromium Trioxide****SECTION 1 PRODUCT IDENTIFICATION**

NAME: Chromium Trioxide  
 EKI ORDER NUMBERS: 3260, 3265  
 SYNONYMS: Chromic Acid  
 CAS NO: 1333-82-0  
 FORMULA: CrO<sub>3</sub>  
 REVISION DATE: 13 April 2004

**\*\*\*\*LABEL HAZARD STATEMENT AND PRECAUTIONS\*\*\*\***

DANGER! CAUSES SEVERE BURNS. HARMFUL IF SWALLOWED OR INHALED. HARMFUL TO RESPIRATORY SYSTEM, LIVER, KIDNEYS AND BLOOD. CONTACT WITH OTHER MATERIAL MAY CAUSE FIRE. CANCER HAZARD. CAN CAUSE CANCER. Risk of cancer depends on duration and level of exposure. Do not get in eyes, on skin, on clothing. Do not taste or swallow. Do not breathe dust or mist. Keep container closed. Use only with adequate ventilation. Wash thoroughly after handling. Keep away from contact with combustible materials.

**SECTION 2 HAZARDOUS INGREDIENTS / EXPOSURE LIMITS**

INGREDIENT	CAS NO	OSHA PEL	ACGIH TLV
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Chromium Trioxide	1333-82-0	0.1 mg CrO <sub>3</sub> /m <sup>3</sup> CEIL	0.01 mg Cr/m <sup>3</sup> TWA

Chromium Trioxide is subject to the reporting requirements of SARA313 and 40CFR372.

**SECTION 3 PHYSICAL / CHEMICAL CHARACTERISTICS**

SOLUBILITY IN WATER: Appreciable (>10%)  
 VAPOR PRESSURE: N/A  
 SPECIFIC GRAVITY: 2.70  
 EVAPORATION RATE: N/A  
 APPEARANCE AND ODOR: Dark red crystals. Odorless.

BOILING POINT: N/A  
 VAPOR DENSITY: N/A  
 MELTING POINT: 197 C

**SECTION 4 FIRE / EXPLOSION HAZARD DATA**

FLASH POINT: N/A  
 FLAMMABLE LIMITS (UPPER AND LOWER): Upper: N/A Lower: N/A  
 EXTINGUISHING MEDIA: Use water spray.  
 SPECIAL FIRE FIGHTING PROCEDURES: Firefighters should wear proper protective equipment and self-contained breathing apparatus with full facepiece operated in positive pressure mode. Move containers from fire area if it can be done without risk. Use water to keep fire-exposed containers cool.

UNUSUAL FIRE AND EXPLOSION HAZARDS: STRONG OXIDIZER. Contact with combustible materials, flammable materials, powdered metals, organics can cause fire or explosion.

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## SECTION 5 REACTIVITY DATA

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STABILITY: Stable

CONDITIONS TO AVOID: Heat

MATERIALS TO AVOID: Combustible materials, strong reducing agents, organic materials

HAZARDOUS DECOMPOSITION OR BYPRODUCTS: None identified

HAZARDOUS POLYMERIZATION: Will not occur.

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## SECTION 6 HEALTH HAZARD DATA

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ROUTES OF ENTRY AND EFFECTS OF OVEREXPOSURE:

INHALATION: Excessive inhalation may cause irritation; may cause respiratory system damage, ulceration of mucous membranes.

SKIN CONTACT: Severe irritation or burns

EYE CONTACT: Severe irritation or burns

SKIN ABSORPTION: None identified

INGESTION: Severe gastrointestinal irritation, burns to mouth and throat

CHRONIC: None identified

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE: None identified

CARCINOGENICITY: NTP-K; Known To Be A Human Carcinogen. IARC-1; Carcinogenic To Humans

### \*\*\*\*FIRST AID PROCEDURES\*\*\*\*

EYES: In case of eye contact, immediately flush with plenty of water for at least 15 minutes.

SKIN: In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before re-use.

INHALATION: If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Prompt action is essential.

INGESTION: CALL A PHYSICIAN. If swallowed, if conscious, immediately induce vomiting.

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## SECTION 7 PRECAUTIONS FOR SAFE HANDLING AND USE

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STEPS TO BE TAKEN IN CASE MATERIAL IS SPILLED OR RELEASED: Wear self-contained breathing apparatus and full protective clothing. Keep combustibles (wood, paper, oil, etc.) away from spilled material. With clean shovel, carefully place material into clean, dry container and cover; remove from area. Flush spill area with water.

WASTE DISPOSAL METHOD: Dispose in accordance with all applicable federal, state, and local environmental regulations.

OTHER PRECAUTIONS: N/A

STORAGE: Store tightly closed at 15-30C.

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## SECTION 8 CONTROL MEASURES

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VENTILATION: Use general or local exhaust ventilation to meet TLV requirements.

RESPIRATORY PROTECTION: Respiratory protection required if airborne concentration exceeds TLV. At concentrations up to 1 ppm, a high-efficiency particulate respirator is recommended. Above this level, a self-contained breathing apparatus is advised.

EYE PROTECTION: Safety goggles

GLOVES: Chemical gloves

OTHER PROTECTIVE CLOTHING: Lab coat and apron.

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