

Common Name: **SODIUM DICHROMATE**

Synonyms: Sodium Bichromate; Chromic Acid, Disodium Salt

CAS No: 10588-01-9

Molecular Formula:  $\text{Na}_2\text{Cr}_2\text{O}_7$ 

RTK Substance No: 1695

Description: Odorless, red or red-orange, crystalline solid

### HAZARD DATA

Hazard Rating	Firefighting	Reactivity
<b>3 - Health</b> <b>0 - Fire</b> <b>0 - Reactivity</b> <b>DOT#:</b> UN 1479 <b>ERG Guide #:</b> 140 <b>Hazard Class:</b> 6 (Poison)	<b>Sodium Dichromate</b> is not combustible, but it is a <b>STRONG OXIDIZER</b> that enhances the combustion of other substances. Use water only. <b>DO NOT USE CHEMICAL</b> or $\text{CO}_2$ as extinguishing agents. <b>POISONOUS GASES ARE PRODUCED IN FIRE</b> , including <i>Sodium Oxides</i> . Use water spray to keep fire-exposed containers cool. <b>Sodium Dichromate</b> may ignite combustibles (wood, paper and oil).	<b>Sodium Dichromate</b> reacts violently with HYDRAZINE; ACETIC ANHYDRIDE; ETHANOL; and SULFURIC ACID. <b>Sodium Dichromate</b> is not compatible with OXIDIZING AGENTS (such as PERCHLORATES, PEROXIDES, PERMANGANATES, CHLORATES, NITRATES, CHLORINE, BROMINE and FLUORINE) and COMBUSTIBLES.

### SPILL/LEAKS

**Isolation Distance:**

Spill: 25 meters (75 feet)

Fire: 800 meters (1/2 mile)

Moisten spilled material first or use a HEPA-filter vacuum for clean-up and place into sealed containers for disposal.

Liquid spills can be neutralized with *Sodium Carbonate*.  
DO NOT wash into sewer.

**Sodium Dichromate** is very toxic to aquatic organisms and may cause long-term effects in the aquatic environment.

### PHYSICAL PROPERTIES

<b>Odor Threshold:</b>	Odorless
<b>Flash Point:</b>	Nonflammable
<b>Specific Gravity:</b>	2.35 (water = 1)
<b>Water Solubility:</b>	Soluble
<b>Boiling Point:</b>	752°F (400°C)
<b>Melting Point:</b>	675°F (357°C)
<b>Molecular Weight:</b>	262
<b>pH:</b>	4 (1% solution)

### EXPOSURE LIMITS

**OSHA:** 0.005  $\text{mg}/\text{m}^3$ , 8-hr TWA

**NIOSH:** 0.001  $\text{mg}/\text{m}^3$ , 10-hr TWA

**ACGIH:** 0.05  $\text{mg}/\text{m}^3$ , 8-hr TWA

**IDLH:** 15  $\text{mg}/\text{m}^3$ 

(All the above are for *Chromium VI*)

The Protective Action Criteria values are:

PAC-1 = 20  $\text{mg}/\text{m}^3$  PAC-2 = 37.8  $\text{mg}/\text{m}^3$  PAC-3 = 37.8  $\text{mg}/\text{m}^3$ 

### PROTECTIVE EQUIPMENT

<b>Gloves:</b>	Nitrile and Natural Rubber
<b>Coveralls:</b>	Tyvek®
<b>Respirator:</b>	>0.001 $\text{mg}/\text{m}^3$ - full facepiece APR with <i>High efficiency filters</i> >1 $\text{mg}/\text{m}^3$ - Supplied air >15 $\text{mg}/\text{m}^3$ - SCBA

### HEALTH EFFECTS

<b>Eyes:</b>	Irritation, burns and possible eye damage
<b>Skin:</b>	Irritation, burns, itching, rash and ulcers
<b>Inhalation:</b>	Nose, throat and lung irritation with coughing, wheezing and shortness of breath
<b>Chronic:</b>	<i>Hexavalent Chromium</i> or <i>Chromium VI</i> compounds cause lung cancer in humans.

### FIRST AID AND DECONTAMINATION

<b>Remove</b>	the person from exposure.
<b>Flush</b>	eyes with large amounts of water for at least 30 minutes. Remove contact lenses if worn. Seek medical attention.
<b>Quickly</b>	remove contaminated clothing. Immediately wash contaminated skin with large amounts of water.
<b>Begin</b>	artificial respiration if breathing has stopped and CPR if necessary.
<b>Transfer</b>	promptly to a medical facility