

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
3 - Health	Sodium Dichromate is not combustible, but it is a STRONG OXIDIZER that enhances the combustion of other substances.	Sodium Dichromate reacts violently with HYDRAZINE; ACETIC ANHYDRIDE; ETHANOL; and SULFURIC ACID.
0 - Fire	Use water only. DO NOT USE CHEMICAL or CO_2 as extinguishing agents.	Sodium Dichromate is not compatible with OXIDIZING AGENTS (such as PERCHLORATES, PEROXIDES, PERMANGANATES, CHLORATES, NITRATES, CHLORINE, BROMINE and FLUORINE) and COMBUSTIBLES.
0 - Reactivity	POISONOUS GASES ARE PRODUCED IN FIRE, including <i>Sodium Oxides</i> .	
DOT#: UN 1479	Use water spray to keep fire-exposed containers cool.	
ERG Guide #: 140	Sodium Dichromate may ignite combustibles (wood, paper and oil).	
Hazard Class: 6 (Poison)		

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
Odor Threshold: Odorless

Flash Point: Nonflammable

Specific Gravity: 2.35 (water = 1)

Water Solubility: Soluble

Boiling Point: 752°F (400°C)

Melting Point: 675°F (357°C)

Molecular Weight: 262

pH: 4 (1% solution)

EXPOSURE LIMITS
OSHA: 0.005 mg/m³, 8-hr TWA

NIOSH: 0.001 mg/m³, 10-hr TWA

ACGIH: 0.05 mg/m³, 8-hr TWA

IDLH: 15 mg/m³

 (All the above are for *Chromium VI*)

The Protective Action Criteria values are:

 PAC-1 = 20 mg/m³ PAC-2 = 37.8 mg/m³ PAC-3 = 37.8 mg/m³
PROTECTIVE EQUIPMENT
Gloves: Nitrile and Natural Rubber

Coveralls: Tyvek®

Respirator: >0.001 mg/m³ - full facepiece APR with *High efficiency filters*

 >1 mg/m³ - Supplied air

 >15 mg/m³ - SCBA

HEALTH EFFECTS
Eyes: Irritation, burns and possible eye damage

Skin: Irritation, burns, itching, rash and ulcers

Inhalation: Nose, throat and lung irritation with coughing, wheezing and shortness of breath

Chronic: *Hexavalent Chromium* or *Chromium VI* compounds cause lung cancer in humans.

FIRST AID AND DECONTAMINATION
Remove the person from exposure.

Flush eyes with large amounts of water for at least 30 minutes. Remove contact lenses if worn. Seek medical attention.

Quickly remove contaminated clothing. Immediately wash contaminated skin with large amounts of water.

Begin artificial respiration if breathing has stopped and CPR if necessary.

Transfer promptly to a medical facility