

## HCP Grade Chromic Acid

### General

The purity of industrial grade chromic acid has generally suffered as domestic and international producers compete for market share. Contaminants such as sulfate, chloride, iron, copper and even insoluble materials are now common. These contaminants may not be significant in other applications, but they become very important to high quality hard chromium plating. This is especially true when ZERO Discharge Recovery is used.

HCP grade chromic acid is manufactured to our stringent specifications. It is intended for use where quality is of prime importance. In addition, HCP grade chromic acid is a non dusting material that is also very easy to pour and resists caking. It is much more user friendly than the typical flake material is. Each batch is assayed to our stringent standards.

### Analysis

	<b>HCP Grade</b>	<b>Other Grads</b>
Chromic Acid (CrO <sub>3</sub> )	99.95%	98.45%
Chloride (Cl)	0%	.15%
Sulfate (So <sub>4</sub> )	0.01%	.25%
Iron (Fe)	0%	.23%
Copper (Cu)	0%	.17%
Other Metals	0.01%	.19%
Insolubles	0.01%	.56%

### Other Data

Formula: CrO<sub>3</sub>, when dissolved in water yields H<sub>2</sub>Cr<sub>2</sub>O<sub>7</sub>

Synonyms: Chromium Trioxide, Chromic Anhydride

Containers: 110.23 pound full open head (FOH) steel drums with a gasket seal.

Physical:

Form:	Deliquescent flakes
Density:	87 lbs. /cu. ft. (approx)
Molecular Weight:	99.99
Specific Gravity:	2.70
Melting Point:	197 <sup>0</sup> C.
Volitization:	110 <sup>0</sup> C. (approx)
Heat of Solution:	2467 cal. /mol.
Solubility in 100 c.c.'s H <sub>2</sub> O:	164.9 grams @ 0 <sup>0</sup> C. 206.7 grams @ 100 <sup>0</sup> C.
Metal Available:	16.87 grams/sq. ft./0.011"

**Caution**

This is an industrial chemical and must be handled carefully and in accordance with the directives provided in the individual SDS forms.

Read and understand the SDS on all of these chemicals before handling or using. Ensure that all regulatory standards are followed and limit personal exposure as required for Cr(VI) by OSHA.

Avoid personal contact with these chemicals, avoid splashing and avoid breathing any fumes released during operation. Do not inhale any dust, mist or vapors from these chemicals. Do not allow these products to contact the skin or eyes. In case of contact, flush immediately with large amounts of fresh water and seek immediate medical attention.

Wear protective clothing such as aprons, gloves, face masks and respirators. Be sure that adequate eyewashes and emergency showers are available nearby before handling or using any of these chemicals.

Designated work clothing should be worn while using these chemicals and the worker(s) should thoroughly shower and change into fresh-clean street clothing before going home. Decontaminate all work clothing before reuse.

The user is responsible for providing adequate work clothing, personal protection, and limiting personal exposure and providing any required clean-up, decontamination as well as any needed medical attention.