

## CHROMIC OXIDE (M100C)

### PROPERTIES:

**Chemical Formula:** Cr<sub>2</sub>O<sub>3</sub>

**CAS Number:** 1308-38-9

**Molecular Weight:** 151.99

**Appearance:** Green Powder

**Particle Shape Spheroidal**  
(4415 °F)

EEC No. 215-160-9

**Stability in Air:** Completely Stable

**Solubility in Water:** Insoluble

**Pigment Classification:** Pigment Green 17; C.I. 77288

**Specific Gravity:** 5.22

**Behavior on Heating:** Completely stable. Melts at 2435 °C

### Chemical Characteristics:

Inert except under very vigorous conditions. Reacts slowly in hot concentrated sulfuric acid. Oxidizes in hot perchloric acid. Also reacts with molten alkali at high temperatures, specifically under oxidizing conditions. Not readily reduced by hydrogen or carbon monoxide - high temperatures and pressures are required.

### TYPICAL ANALYSIS:\*

Chromium as Cr <sub>2</sub> O <sub>3</sub> , %	99.5
Water Soluble Salts, %	0.1
Moisture at 110°C, %	0.1
Specific Surface Area (BET m <sup>2</sup> /gm)	5.0
Retention on 45 micron (325 mesh) screen, %	0.05
pH	6.4

\* Data represent normal production values and may be slightly higher or lower for actual production. Values are not to be used as a specification.

### GENERAL APPLICATIONS:

Pigment Grade Chromium Oxides or Pure Chromium Oxides, as they are sometimes called, find a variety of applications in paints and coatings, enamels, concrete and other building products, floor coverings, and in other uses where permanence of color is paramount.

Significant characteristics of the Pigment Grade Chromium Oxides, as compared to other green pigments, are their stability and performance. They are unaffected by acids, alkalis, paint vehicles and solvents, and they possess excellent durability against light, harsh weather and extremely high temperatures (such as those used in firing of ceramics) M100C is a light yellowish-green powder.

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## CHROMIC ACID SOLUTION CLF (500)

### HEALTH AND SAFETY PRECAUTIONS:

Chromium (III) Oxide may be regarded as essentially nontoxic. However, excessive exposure may cause irritation to the eyes, skin or lungs. Appropriate precautions should be observed in handling to minimize skin contact and to maintain air concentrations below the TLV of 0.5 mg Cr/m<sup>3</sup>. For detailed information, consult our Safety Data Sheet (SDS), which is available upon request.

### STORAGE:

Indefinite shelf life when stored under conditions that prevent degradation of the packaging.

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Doc No. CASQT4.4.09 08/18

Site: Elementis Chromium Castle Hayne

Elementis Chromium

3800 Buddy Lawrence Drive  
Corpus Christi, TX 78407  
USA: 800/531-3188  
Fax: 361/880-7760  
[www.elementis.com](http://www.elementis.com)