

# Chromium Oxide

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This document provides a brief description of Chromium Oxide, its uses, and the potential hazards associated with short and long term exposure. Environmental impact information for accidental releases is included. This information is general in nature and is not intended as a replacement for the safety data sheet (SDS), product label and other safe handling literature. For additional information consult the LANXESS safety data sheet.

## Identification

<b>Product Name:</b>	Chromium Oxide Green GS
<b>Chemical Name:</b>	Chromium Oxide
<b>Synonym(s):</b>	Chrome Green Chromic Acid Green Chromium Green-Black Hematite Dichromium Trioxide
<b>CAS Number:</b>	1308-38-9

## Description

<b>Overview:</b>	Chromium Oxide is an odorless, light to dark green solid at ambient temperatures and is sold in powder form.
<b>Uses:</b>	Chromium Oxide is used as a color additive in the manufacture of abrasives, cosmetics, printing fabrics, plastics, paints, ceramics, asphalt roofing, refractory materials and colored concrete products.
<b>Properties:</b>	<b>Melting Point:</b> >3,632°F (2,000°C) <b>Solubility in Water:</b> Insoluble

### Potential Human Health Effects

#### Occupational Exposure

Potential for occupational exposure exists through inhalation, skin or eye contact during the manufacture of Chromium Oxide and at transloading, storage and staging areas. A much lower potential for exposure exists in facilities using the chemical as a colorant in the manufacture of other products, since the majority of Chromium Oxide sold by LANXESS is used in closed manufacturing processes by trained personnel.

#### Employee Training

Workers handling Chromium Oxide are trained to implement proper handling procedures and to understand the potential health and physical hazards of this product. A NIOSH approved air-purifying particulate respirator is recommended for transloading, unloading and other operations not contained within a closed system. In addition, LANXESS recommends that goggles, permeation resistant clothing, gloves and foot protection be worn when handling Chromium Oxide.

#### Consumer Exposure

LANXESS does not sell this product to the general public. Chromium Oxide occurs naturally in the environment and is an essential trace mineral in the human diet. Consumers handling products manufactured with Chromium Oxide as a color additive may be exposed to trace amounts of the inorganic chemical.

#### Short-Term Health Effects

Airborne Chromium Oxide dust may cause respiratory tract irritation with symptoms of coughing, sore throat and runny nose. Skin or eye contact may result in mild to severe irritation in the affected areas, with symptoms of redness.

#### Long-Term Health Effects

Repeated or prolonged overexposure may cause effects as noted under Short-Term Health Effects.

### Physical Hazards

Chromium Oxide is stable and non-flammable.

### Potential Environmental Impact

Chromium Oxide is non-volatile, insoluble in water and naturally occurring. Biodegradation information is not applicable to inorganic substances. Releases to the environment would likely settle into soils and sediments. Such releases may pose a danger to fish (low toxicity), invertebrates (moderate toxicity) and aquatic plants (low toxicity) prior to settling.

### Conclusion

Under normal conditions of anticipated use as described in this Product Safety Assessment, and if the recommended safe use and handling procedures are followed, Chromium Oxide is not expected to pose a significant risk to human health or the environment.

## **References**

**International Chemical Safety Card**, International Programme on Chemical Safety (IPCS)

**Safety Data Sheet (SDS), CHROME OXIDE GREEN GS**, LANXESS Corporation

**MedlinePlus Medical Encyclopedia**, U.S. National Library of Medicine and the National Institutes of Health

**ToxNet Hazardous Substances Data Bank**, U.S. National Library of Medicine, National Institutes of Health and the U.S. Department of Health and Human Services

## **Contact Information**

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## **Notices**

### **Use and Application Information**

The conditions of your use and application of our products, technical assistance and information (whether verbal, written or by way of production evaluation(s)), including any suggested formulations and recommendations, are beyond our control. Therefore, it is imperative that you test our products, technical assistance and information to determine to your own satisfaction whether they are suitable for your intended uses and applications. This application-specific analysis at least must include testing to determine suitability from a technical as well as health, safety, and environmental standpoint. Such testing has not necessarily been done by LANXESS. All information is given without warranty or guarantee. It is expressly understood and agreed that customer assumes and hereby expressly releases LANXESS from all liability, in tort, contract or otherwise, incurred in connection with the use of our products and information. Any statement or recommendation not contained herein is unauthorized and shall not bind LANXESS Corporation. Nothing herein shall be construed as a recommendation to use any product in violation of any patent covering any material or its use. No permission or license to use any patent is implied or in fact granted by this publication.