

Chromic acid

This document provides a brief description of chromic acid, 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 Corporation safety data sheet.

Identification

Chemical Name: Chromic acid

Synonym: Sodium dichromate

Sodium bichromate

Chromic acid, disodium salt

disodium [(oxidodioxochromio)oxy]chromiumoylolate dihydrate

CAS Number: 10588-01-9

Applicable LANXESS

Materials:

Please contact a LANXESS sales representative.

Description

Overview: Chromic acid is a reddish to bright orange crystalline solid at room

temperature.

Uses: This material may be used as a dyeing auxiliary material in the production

of leather goods.

Properties: Solubility in Water: very water soluble

 Density:
 ≈2.5 (20 °C)

 Melting Point:
 357 °C (657°F)

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Potential Human Health Effects

Occupational Exposure

Potential for occupational exposure exists during manufacture, and in unloading, storage, staging and transfer operations at facilities using the LANXESS material in the production of other products. A much lower potential for exposure exists in facilities using this substance in closed manufacturing processes by trained personnel.

Employee Training

Workers handling the LANXESS manufactured material should be trained to implement proper handling procedures and to understand the potential health and physical hazards of this product. Process enclosures, local exhaust ventilation, or other engineering controls should be used to protect workers from potential airborne concentrations. When handling this material, it is advised to maintained airborne concentrations below the occupational exposure limits. Workers should wear NIOSH approved, air purifying particulate respirators with N-95 filters or positive pressure self-contained breathing apparatus or supplied air. In addition, it is recommended to use chemical resistant gloves, tightly fitting goggles, and chemical resistant protective suit.

Consumer Exposure

LANXESS Corporation does not sell chromic acid, nor materials containing the substance, to the general public.

Short-Term Health Effects

Chromic acid is fatal if inhaled and sensitizing to the respiratory tract. Symptoms may include asthma, pulmonary edema, wheezing and difficulty breathing, or coughing. If ingested, chromic acid may cause symptoms including diarrhea, vomiting, abdominal pain, nausea, or in extreme cases damage to health. This material is corrosive to the eyes, skin, and mucous membranes. Symptoms of corrosion may include burning, reddening, and possible permanent damage. By skin contact, chromic acid may be harmful and cause allergic reaction with symptoms of reddening, swelling, and/or rash. Once sensitized, a severe allergic reaction may occur at low concentrations.

Long-Term Health Effects

Adverse effects from repeated or prolonged contact may include reproductive effects and genetic effects. By prolonged inhalation, this material may cause cancer or cardiovascular effects.

Physical Hazards

This material is stable under normal conditions of use. Chromic acid is an oxidizing material which may cause intensifying fire. Prevent contact with combustible materials, reducing agents, amines, and/or oxidizing agents. By thermal decomposition, this material may produce metal oxides.

Potential Environmental Impact

An accidental release to the environment may pose a danger to fish (low toxicity), invertebrates (low toxicity) and other aquatic organisms (low toxicity) prior to degradation.

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, this material is not expected to pose a significant risk to human health or the environment.

References

European Chemicals Agency, Sodium dichromate, December 2018

Safety Data Sheet (SDS), Sodium dichromate crystals, LANXESS Corporation, March 2015

Contact Information

LANXESS Corporation, Product Safety & Regulatory Affairs, 111 RIDC Park West Drive, Pittsburgh, PA 15275-1112, USA, Phone 1-800-526-9377 [1-800-LANXESS]

Notices

Use and Application Information

The manner in which you use and the purpose to which you put and utilize our products, technical assistance and information (whether verbal, written or by way of production evaluations), 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 must at least include testing to determine suitability from a technical as well as health, safety, and environmental standpoint. Such testing has not necessarily been done by us. Unless we otherwise agree in writing, all products are sold strictly pursuant to the terms of our standard conditions of sale. All information and technical assistance is given without warranty or guarantee and is subject to change without notice. It is expressly understood and agreed that you assume and hereby expressly release us from all liability, in tort, contract or otherwise, incurred in connection with the use of our products, technical assistance, and information. Any statement or recommendation not contained herein is unauthorized and shall not bind us. Nothing herein shall be construed as a recommendation to use any product in conflict with patents covering any material or its use. No license is implied or in fact granted under the claims of any patent.