

# Calcium formate

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This document provides a brief description of calcium formate, 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>	Calcium formate
<b>Chemical Name:</b>	Calcium formate
<b>Synonym(s):</b>	Calcium diformate Calcium salt
<b>CAS Number:</b>	544-17-2

## Description

<b>Overview:</b>	Calcium formate is a white to yellow solid in crystal or powder form at ambient temperatures with a slight acidic odor.
<b>Uses:</b>	Calcium formate is a naturally occurring chemical found in the human body and in many food sources. LANXESS' calcium formate is primarily used in the manufacture of tiling grouts and concrete products. The chemical can also be used as a component in the manufacture of industrial drilling fluids and lubricants, in the tanning of leather, and in flue gas scrubbing operations.
<b>Properties:</b>	<b>Melting Point:</b> 572°F (300°C) <b>Solubility in Water:</b> Soluble

## **Potential Human Health Effects**

### **Occupational Exposure**

Potential for exposure exists during manufacture, at transloading facilities, during transfers to storage or staging areas and in the manufacture of products containing the chemical, where particulate material may be suspended in the air and inhaled.

### **Employee Training**

Workers handling calcium formate are trained to implement proper handling procedures and to understand the potential health and physical hazards of this product. NOISH approved respirators are recommended for personnel working in areas where they may come in contact with the substance. In addition, LANXESS recommends that workers wear goggles, long-sleeved shirts, long pants and gloves when handling calcium formate to minimize direct skin contact.

### **Consumer Exposure**

LANXESS Corporation does not sell this product to the general public. Grouts and cement mixes made with LANXESS' calcium formate generally contain less than 1% of the chemical, so consumers using these products would not be subject to overexposure.

### **Short-Term Health Effects**

Short-term exposure to sufficient quantities of calcium formate may be irritating to the eyes or, if inhaled, to mucous membranes in the upper respiratory tract. Ingestion in concentrated forms may result in gastrointestinal irritation, with symptoms of nausea, vomiting and diarrhea.. Skin contact may be corrosive with symptoms of reddening, itching, swelling, butning, and possible permanent damage.

### **Long-Term Health Effects**

No long-term health effects are associated with this product.

## **Physical Hazards**

Calcium formate is a stable, non-volatile solid at room temperature. Acidic environments should be avoided. Exposure to heat, open flames and other potential sources of ignition must be avoided. Keep away from oxidizing and reducing agents.

## **Potential Environmental Impact**

Calcium formate is readily biodegradable and presents little or no risk of accumulation in the environment. Calcium formate was found to have a relatively low toxicity to fish. Based on data from sodium formate, calcium formate is also expected to have a relatively low toxicity to invertebrates and aquatic plants.

## **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, calcium formate 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), CALCIUM FORMATE*, LANXESS Corporation  
*MedlinePlus Medical Encyclopedia*, U.S. National Library of Medicine and the National Institutes of Health

## **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.