

Vulkacit CZ/EG-C

This document provides a brief description of Vulkacit CZ/EG-C, 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

Product Name:	Vulkacit CZ/EG-C
Chemical Name:	n-Cyclohexyl-2-benzothiazolesulfenamide coated with mineral oil
Synonym(s):	CBS 2-(Cyclohexylaminothio)benzothiazole Cyclohexyl benzothiazole sulfenamide
CAS Number:	95-33-0

Description

Overview:	Vulkacit CZ/EG-C is a light gray solid in granule form at ambient temperatures. The product has a slight odor.
Uses:	Vulkacit CZ/EG-C is used as a vulcanization accelerator in the production of tires and other rubber products.
Properties:	Melting Point: > 208°F (98°C) Flash Point: 334.4°F (168°C) Solubility in Water: Slight

Potential Human Health Effects

Occupational Exposure

Potential for exposure exists through inhalation, ingestion, skin or eye contact during cleaning, maintenance and repair work in facilities that manufacture Vulkacit CZ/EG-C; at transloading facilities, during transfers to storage or staging areas and—in its application as a vulcanization accelerator—during the charging of mixers.

Employee Training

Workers handling Vulkacit CZ/EG-C 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 operations where dust concentrations exceed appropriate standards/guidelines. In addition, LANXESS recommends that goggles, permeation resistant clothing, gloves and foot protection be worn when handling Vulkacit CZ/EG-C.

Consumer Exposure

LANXESS Corporation does not sell this product to the general public. Rubber products manufactured using Vulkacit CZ/EG-C as an accelerator may retain encapsulated n-cyclohexyl-2-benzothiazolesulfenamide and persons susceptible to allergic skin reactions may experience temporary skin irritation from direct contact with these products. Trace amounts of n-cyclohexyl-2-benzothiazolesulfenamide can leach from rubber goods manufactured using the chemical as an intermediate, and the chemical has been found in drinking water and other water sources.

Short-Term Health Effects

Short-term skin or eye contact with Vulkacit CZ/EG-C may cause mild irritation. Susceptible individuals may experience an allergic reaction from direct contact with symptoms of redness, itching, swelling or rash. Inhalation of Vulkacit CZ/EG-C dust may cause respiratory tract irritation with symptoms of coughing, sore throat and runny nose. Vulkacit CZ/EG-C is not expected to be harmful if swallowed, although abdominal pain, nausea, vomiting and diarrhea may occur.

Long-Term Health Effects

Repeated or prolonged overexposure may result in sensitization and may cause effects as noted under Short-Term Health Effects. Certain mineral oils have been identified as known or suspected human carcinogens as well as fertility damage.

Physical Hazards

Vulkacit CZ/EG-C is a stable, non-volatile solid at room temperature. Avoid contact with strong oxidizing agents. Large concentrations of dust may form explosive mixtures with air. Heating to decomposition may release carbon monoxide and other toxic gases. Exposure to heat, open flames and other potential sources of ignition should be avoided.

Potential Environmental Impact

Vulkacit CZ/EG-C is not biodegradable but it does break down into biodegradable substances with prolonged exposure to water or light. Vulkacit CZ/EG-C may pose a potential danger to fish (slight toxicity), invertebrates (moderate to high toxicity) and aquatic plants (moderate to high toxicity) prior to degrading. Accumulation in the environment is not expected.

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, Vulkacit CZ/EG-C is not expected to pose a significant risk to human health or the environment.

References

European Union Risk Assessment Report: n-Cyclohexylbenzothiazol-2-sulphenemide, European Commission

Safety Data Sheet (SDS), VULKACIT CZ/EG-C, LANXESS Corporation

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

Toxline Toxicology Data Network, U.S. National Library of Medicine, National Institutes of Health and the U.S. Department of Health and Human Services

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

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