

Dicyclohexyl Phthalate

This document provides a brief description of dicyclohexyl phthalate, 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: 1,2-Benzenedicarboxylic acid, dicyclohexyl ester

Synonym(s): Dicyclohexyl phthalate
Phthalic acid dicyclohexyl ester

CAS Number: 84-61-7

Applicable LANXESS Materials: Uniplex 250 Uniplex 250M
Uniplex 250L

Description

Overview: Dicyclohexyl phthalate (DCHP) is a white to off-white granular solid at ambient temperatures possessing a mild, characteristic odor.

Uses: The organic solid is incorporated in the aforementioned LANXESS materials for use as a plasticizer. Specific LANXESS applications of this substance include food wrappers, food and pharmaceutical labels, and other applications requiring delayed heat activation adhesion.

Properties:

Solubility in Water:	1.015 mg/l; Slightly soluble
Melting Point:	63°C (145.4°F)
Bulk Density:	0.787 g/ml

Potential Human Health Effects

Occupational Exposure

Potential for occupational exposure exists during manufacture, and in unloading, storage, staging and transfer operations at facilities using DCHP as an additive. A much lower potential for exposure exists in facilities using this material in closed manufacturing processes by trained personnel.

Employee Training

Workers handling materials containing the organic compound should be trained to implement proper handling procedures and to understand the potential health and physical hazards of this product. Process enclosures, explosion-proof local exhaust ventilation or other engineering controls should be used to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep dust concentrations below any lower explosive limits. It is recommended that safety glasses with side-shields, permeation resistant gloves, work clothing (long pants and long-sleeved shirts) and suitable protective footwear be worn when handling this material. In cases where ventilation is insufficient or airborne concentrations are unknown, an appropriate respirator should be worn.

Consumer Exposure

LANXESS Corporation does not sell DCHP, nor materials containing the organic compound, to the general public. Downstream customers may be exposed to this material through inhalation of ambient air, ingestion of certain foods and beverages or by dermal contact with products manufactured using the chemical as an additive.

Short-Term Health Effects

DCHP may cause an allergic skin reaction. Once sensitized, an allergic skin reaction may occur with symptoms of redness, swelling and rash when subsequently exposed to very low levels.

Long-Term Health Effects

If ingested, DCHP is suspected to cause damage to fertility or the unborn child.

Physical Hazards

DCHP is stable under normal conditions of use. Prevent contact with strong oxidizing agents, acids and bases. Fine dust clouds may form explosive mixtures with air. Avoid heat, open flames and other potential sources of ignition. Heating to decomposition may release carbon monoxide and carbon dioxide.

Potential Environmental Impact

This material is biodegradable. An accidental release to the environment may pose a danger to fish, invertebrates and other aquatic organisms prior to degradation. The chemical may adsorb to suspended solids and sediment and may accumulate in the tissues of aquatic organisms.

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

References

European Chemical Agency, Dicyclohexyl phthalate, 2017
Safety Data Sheet (SDS), Uniplex 250, LANXESS Corporation
ChemAdvisor, Dicyclohexyl, 1,2-benzendicarboxylate, 2017

Contact Information

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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.