

Diisododecyl Sebacate

This document provides a brief description of diisododecyl sebacate, 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:	Decanedioic acid, 1,10-diisodecyl ester	
Synonym(s):	Diisodecyl sebacate Decanedioic acid, diisodecyl ester bis(8-Methylnonyl) decanedioate Diisodecyl decanedioate Sebacic acid, diisodecyl ester	
CAS Number:	28473-19-0	
Applicable LANXESS Materials:	Uniplex DIDS	Uniplex DIDS (EU)
	Uniplex DIDS/ LO	

Description

Overview:	Diisodecyl sebacate is a clear, colorless, organic liquid in ambient temperatures. The product has a mild, characteristic odor.	
Uses:	As sold by LANXESS, this material functions as a low temperature, low volatility plasticizer for use in wire and cable applications.	
Properties:	Solubility in Water:	Immiscible
	Boiling Point:	380 to 440°C (716 to 824°F)
	Flash Point:	>226.67°C (>440°F), <i>Pensky-Martens Closed Cup</i>
	Relative Density:	0.909 g/cm ³ (20°C)
	Auto-Ignition:	260°C (500°F)

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 aforementioned LANXESS materials containing diisodecyl sebacate 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 diisodecyl sebacate should be trained to implement proper handling procedures and to understand the potential health and physical hazards of this product. Good general ventilation should be sufficient to control worker exposure to airborne contaminants. In cases where ventilation is insufficient or airborne concentrations are unknown, a NIOSH approved, air-purifying organic vapor respirator should be used. In addition, it is recommended that splash proof goggles and permeation resistant gloves, clothing and foot protection be worn when handling the substance.

Consumer Exposure

LANXESS Corporation does not sell diisodecyl sebacate, nor materials containing the substance, to the general public.

Short-Term Health Effects

No known significant effects or critical hazards.

Long-Term Health Effects

No known significant effects or critical hazards.

Physical Hazards

Diisodecyl sebacate is stable under normal conditions of use. Heating to decomposition may release carbon oxides. Avoid extreme temperatures and contact with oxidizing agents.

Potential Environmental Impact

No known significant effects or critical hazards. Diisodecyl sebacate is readily biodegradable. An accidental release of the substance 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, diisodecyl sebacate is not expected to pose a significant risk to human health or the environment.

References

European Chemical Agency, Diisodecyl sebacate, European Chemicals Agency, December 2017

Plastics Additives Business Product Brochure: Plasticizers, LANXESS Corporation, 2012

PubChem Open Chemistry Database, Diisodecyl sebacate, U.S. National Library of Medicine, National Center for Biotechnology Information

Safety Data Sheet (SDS), Uniplex DIDS, LANXESS Corporation

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.