

Diisobutyl phthalate

This document provides a brief description of Diisobutyl 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 material safety data sheet.

Identification

Product Name:	UNIPLEX 155
Chemical Name:	Diisobutyl phthalate
Synonym(s):	1,2-Benzenedicarboxylic acid, bis (2-methylpropyl) ester Di(isobutyl)-1,2-benzenedicarboxylate DIBP Phthalic acic, diisobutyl ester
CAS Number:	84-69-5

Description

Overview:	Diisobutyl phthalate is a colorless, oily liquid at ambient temperatures. The chemical has a mild, characteristic odor.								
Uses:	Diisobutyl phthalate is sold by LANXESS for use in the manufacture of foundry resins for metal casting and for use as a solvent or plasticizer in the production of plastic and rubber products. The chemical compound is also used as an additive in concrete products, adhesives, paints, printing inks, fuel stabilizers and many other consumer and industrial products.								
Properties:	<table><tr><td>Boiling Point:</td><td>327°C (620.6°F)</td></tr><tr><td>Flash Point:</td><td>185°C (365°F) closed cup</td></tr><tr><td>Auto-ignition:</td><td>810°F (432°C)</td></tr><tr><td>Solubility in Water:</td><td>Low</td></tr></table>	Boiling Point:	327°C (620.6°F)	Flash Point:	185°C (365°F) closed cup	Auto-ignition:	810°F (432°C)	Solubility in Water:	Low
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Potential Human Health Effects

Occupational Exposure

Potential for occupational exposure exists during manufacture, at bulk unloading, storage and staging areas, and during hose connection, disconnection, sampling and transfer operations in facilities where the chemical is used as an additive or ingredient in the manufacture of other products. A much lower potential for exposure exists in facilities using Diisobutyl phthalate in closed manufacturing processes by trained personnel.

Employee Training

Workers handling Diisobutyl phthalate should be trained to implement proper handling procedures and to understand the potential health and physical hazards of this product. A NIOSH approved air-purifying organic vapor respirator is recommended in cases of insufficient ventilation. In addition, LANXESS recommends that splash proof goggles, permeation resistant gloves, long pants, long-sleeved shirts and foot protection be worn when handling Diisobutyl phthalate.

Consumer Exposure

LANXESS Corporation does not sell Diisobutyl phthalate to the general public. Consumers may be exposed to trace amounts of the chemical through inhalation of dusts or vapors present in ambient air, through ingestion of natural food products and drinking water, or through dermal contact with consumer products that include the chemical as an additive.

Short-Term Health Effects

Diisobutyl phthalate poses no known significant short-term health effects when recommended instructions for use are followed.

Long-Term Health Effects

Diisobutyl phthalate poses no known significant long-term health effects when recommended instructions for use are followed. However, laboratory testing of phthalates with similar structures indicates that Diisobutyl phthalate may have the potential to interfere with male reproductive development.

Physical Hazards

Diisobutyl phthalate is stable under normal conditions of use. Avoid contact with strong oxidizing agents. Diisobutyl phthalate is combustible at high temperatures. Heating to decomposition may release carbon monoxide, carbon dioxide and other potentially toxic fumes or gases. Avoid heat, open flames and other potential sources of ignition.

Potential Environmental Impact

Diisobutyl phthalate is readily biodegradable. An accidental release to the atmosphere will degrade in the presence of sunlight. Releases to water may pose a danger to fish (low toxicity), invertebrates (low toxicity) and aquatic plants (low toxicity) prior to degradation. The chemical may adsorb to suspended soils and sediments 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, Diisobutyl phthalate is not expected to pose a significant risk to human health or the environment.

References

International Chemical Safety Card, DIISOBUTYL PHTHALATE, International Programme on Chemical Safety (IPCS)

IUCLID Dataset, Diisobutyl Phthalate (84-69-5), European Chemicals Bureau, European Commission

Material Safety Data Sheet (SDS), UNIPLEX 155, LANXESS Corporation

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

Toxicity Review for Diisobutyl Phthalate (84-69-5), U.S. Consumer Product Safety Commission

ToxNet Hazardous Substance 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

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.