

# Isododecane

---

This document provides a brief description of Isododecane, 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 material safety data sheet (SDS), product label and other safe handling literature. For additional information consult the LANXESS Corporation safety data sheet.

## Identification

<b>Product Name:</b>	Purolan IDD
<b>Chemical Name:</b>	Isododecane
<b>Synonym(s):</b>	Hydrocarbons, C4, 1,3-butadiene-free, polymerized triisobutylene fraction, hydrogenated
<b>CAS Number:</b>	93685-81-5

## Description

<b>Overview:</b>	Isododecane is a colorless, odorless liquid at ambient temperatures.										
<b>Uses:</b>	Isododecane is sold by LANXESS primarily for use as an ingredient in the manufacture of personal care products, including cosmetics (mascara, eyeliner and lip products), make-up removers, face creams, pre- and aftershaves, sun care products, deodorant sprays and hair care products.										
<b>Properties:</b>	<table><tr><td><b>Melting Point:</b></td><td>-81°C (-113.8°F)</td></tr><tr><td><b>Boiling Point:</b></td><td>176 to 192 °C (222.8 to 377.6°F)</td></tr><tr><td><b>Flash Point:</b></td><td>45°C (113°F) closed cup</td></tr><tr><td><b>Auto-Ignition:</b></td><td>410°C (770°F)</td></tr><tr><td><b>Solubility in Water:</b></td><td>Slight</td></tr></table>	<b>Melting Point:</b>	-81°C (-113.8°F)	<b>Boiling Point:</b>	176 to 192 °C (222.8 to 377.6°F)	<b>Flash Point:</b>	45°C (113°F) closed cup	<b>Auto-Ignition:</b>	410°C (770°F)	<b>Solubility in Water:</b>	Slight
<b>Melting Point:</b>	-81°C (-113.8°F)										
<b>Boiling Point:</b>	176 to 192 °C (222.8 to 377.6°F)										
<b>Flash Point:</b>	45°C (113°F) closed cup										
<b>Auto-Ignition:</b>	410°C (770°F)										
<b>Solubility in Water:</b>	Slight										

### Potential Human Health Effects

#### Occupational Exposure

Potential for occupational exposure exists during manufacture and in storage, staging and transfer operations at facilities using the chemical in the manufacture of other products. A much lower potential for exposure exists in facilities using Isododecane in closed manufacturing processes by trained personnel.

#### Employee Training

Workers handling Isododecane 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. Engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. A NIOSH approved, air-purifying organic vapor respirator should be worn when high levels of vapors or aerosols are not controlled by local ventilation. In addition, LANXESS recommends rubber or nitrile gloves, chemical splash goggles or a face shield, long pants and long-sleeved shirt be worn when handling Isododecane.

#### Consumer Exposure

LANXESS Corporation does not sell Isododecane to the general public.

#### Short-Term Health Effects

Skin contact may cause defatting of the skin with symptoms of dryness and cracking. May be fatal if swallowed and enters airways.

#### Long-Term Health Effects

Prolonged or repeated contact may cause defatting of the skin with symptoms of irritation, cracking and/or dermatitis.

### Physical Hazards

Isododecane is stable under normal conditions of use. Avoid contact with strong oxidizers. Isododecane is flammable in liquid and vapor form. Vapor/gas is heavier than air and may spread along the ground or accumulate in low or confined areas. Heating to decomposition may release carbon monoxide, carbon dioxide and other gases/fumes. Avoid heat, open flames, electrostatic discharges and other potential sources of ignition.

### Potential Environmental Impact

Isododecane degrades slowly and may accumulate in the environment. An accidental release to environmental water sources may pose a danger to fish (low toxicity), invertebrates (low toxicity) and aquatic plants (low toxicity) prior to degradation.

## **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, Isododecane is not expected to pose a significant risk to human health or the environment.

## **References**

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

*Safety Data Sheet (SDS), PUROLAN IDD*, LANXESS Corporation

## **Contact Information**

LANXESS Corporation, Product Safety & Regulatory Affairs, 111 RIDC Park West Drive, Pittsburgh, PA 15275-1112, USA, Phone 1-800-526-9377 [1-800-LANXESS]

## **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.