Benzyl acetate

This document provides a brief description of Benzyl acetate, 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

Product Name: BENZYL ACETATE
Chemical Name: Benzyl acetate
Synonym(s): Acetic acid, phenylmethyl ester
Alpha-acetoxytoluene
Benzyl ethanoate
Phenylmethylacetate

CAS Number: 140-11-4

Description

Overview: Benzyl acetate is a clear, colorless liquid at ambient temperatures. The chemical has a slight, jasmine-like odor.

Uses: Benzyl acetate is sold by LANXESS for use as a flavoring compound and/or fragrance additive. The chemical is also used as a solvent in other products.

Properties: Melting Point: -52 to -51°C (-61.6 to -59.8°F)
Boiling Point: 213 to 214°C (415.4 to 417.2°F)
Flash Point: 102°C (215.6°F) closed cup
Auto-ignition: 460°C (860°F)
Solubility in Water: Slightly
Potential Human Health Effects

Occupational Exposure
Potential for occupational exposure exists during manufacture, at bulk unloading, storage and staging areas and during charging operations in facilities using Benzyl acetate as an additive in the manufacture of other products. A much lower potential for exposure exists in facilities using Benzyl acetate in closed manufacturing processes by trained personnel.

Employee Training
Workers handling Benzyl acetate 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 respirator with organic vapor cartridges and particulate prefilter can be used to minimize inhalation exposure. In addition, LANXESS recommends the use of safety glasses with side shields, permeation resistant gloves and that clothing and foot protection be worn when handling Benzyl acetate.

Consumer Exposure
LANXESS Corporation does not sell Benzyl acetate to the general public. The chemical may be present in soaps, detergents, fragrances and other products manufactured using Benzyl acetate as an additive. Benzyl acetate also occurs naturally in a variety of fruits and flowers.

Short-Term Health Effects
Benzyl acetate may be irritating to skin and eyes. Inhalation may cause nausea, vomiting, a sore throat and/or central nervous system depression with symptoms of headache, drowsiness/fatigue, dizziness/vertigo, confusion or unconsciousness. Ingestion may cause nervous system effects with symptoms of dizziness, headache, lack of coordination, numbness and/or confusion.

Long-Term Health Effects
Prolonged or repeated exposure may cause kidney damage.

Physical Hazards
Benzyl acetate is stable under normal conditions of use. Heating to decomposition may release carbon monoxide, carbon dioxide and other potentially toxic fumes and gases. Vapors may form explosive mixtures with air at elevated temperatures (> 90°C / 194°F). Avoid heat, open flames and other potential sources of ignition.

Potential Environmental Impact
Benzyl acetate is readily biodegradable. An accidental release to water may pose a danger to fish (low toxicity), invertebrates (low toxicity) and aquatic plants (low toxicity) prior to degradation. The chemical compound may adsorb to suspended soils and sediments prior to degradation. Accumulation in the tissues of aquatic organisms 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, Benzyl acetate is not expected to pose a significant risk to human health or the environment.

References

IARC Monograph – Benzyl Acetate, International Agency for Research on Cancer (IARC), World Health Organization

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

Safety Data Sheet (SDS), BENZYL ACETATE, LANXESS Corporation

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

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

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.