

Butylated hydroxy toluene

This document provides a brief description of Butylated hydroxy toluene, 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 safety data sheet.

Identification

Product Name:	Butylated hydroxy toluene
Chemical Name:	2,6-Di-tertiary-butyl-p-cresol
Synonym(s):	2,6-Bis(1,1-dimethylethyl)-4-methyl-phenol 2,6-Di-tert-butyl-p-cresol 2,6-Di-tert-butyl-p-methylphenol BHT
CAS Number:	128-37-0

Description

Overview:	Butylated hydroxy toluene is a colorless, odorless solid at ambient temperatures. The chemical is sold in dry form.								
Uses:	Butylated hydroxy toluene is manufactured by LANXESS primarily for use as an antioxidant in the production of synthetic rubbers and plastics. The chemical is also used as a preservative in petroleum products, foods and food packaging materials, animal feeds, paints, inks and cosmetics.								
Properties:	<table><tr><td>Melting Point:</td><td>Approx. 156°F (68.89°C)</td></tr><tr><td>Boiling Point:</td><td>Approx. 509°F (265°C)</td></tr><tr><td>Flash Point:</td><td>260.6°F (127°C)</td></tr><tr><td>Solubility in Water:</td><td>Low</td></tr></table>	Melting Point:	Approx. 156°F (68.89°C)	Boiling Point:	Approx. 509°F (265°C)	Flash Point:	260.6°F (127°C)	Solubility in Water:	Low
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Flash Point:	260.6°F (127°C)								
Solubility in Water:	Low								

Potential Human Health Effects

Occupational Exposure

Potential for occupational exposure exists during manufacture, at transloading, storage and staging areas, at filling and sampling stations and during maintenance operations. A much lower potential for exposure exists in production facilities with automated filling/sampling stations and where closed manufacturing processes are utilized by trained personnel.

Employee Training

Workers handling butylated hydroxy toluene are trained to implement proper handling procedures and to understand the potential health and physical hazards of this product. A NIOSH approved respirator is recommended for transloading, unloading, sampling and other operations not contained within a closed system. In addition, LANXESS recommends that goggles, permeation resistant clothing, gloves and foot protection be worn when handling butylated hydroxy toluene.

Consumer Exposure

LANXESS does not sell butylated hydroxy toluene to the general public. The chemical is approved for use as a food additive and consumers may be exposed to the chemical from ingestion of food products prepared with butylated hydroxy toluene as an ingredient. Exposure to trace amounts of the chemical may also occur through handling of consumer products manufactured using the chemical as an antioxidant.

Short-Term Health Effects

Direct contact with butylated hydroxy toluene may cause mild skin irritation. Concentrations of butylated hydroxy toluene dust may be irritating to the eyes and upper respiratory tract with symptoms of coughing, sore throat and runny nose. Ingesting sufficient quantities of the chemical may result in nausea, loss of appetite and stomach inflammation. Extreme cases of oral exposure may cause nausea, vomiting, dizziness, confusion or temporary loss of consciousness.

Long-Term Health Effects

Butylated hydroxy toluene is not expected to cause any long-term adverse health effects.

Physical Hazards

Butylated hydroxy toluene is stable under normal conditions of use. Avoid contact with strong oxidizing agents. High concentrations of butylated hydroxy toluene dust may form explosive mixtures with air. Heating to decomposition may release carbon oxides and other potentially toxic fumes. Exposure to heat, open flames and other potential sources of ignition should be avoided.

Potential Environmental Impact

Butylated hydroxy toluene decomposes rapidly with exposure to air and sunlight. A release to water degrades more slowly and the chemical has the potential to accumulate in the fatty tissues of fish. Testing shows no harmful effects to fish, invertebrates or aquatic plants at saturation concentrations.

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, Butylated hydroxy toluene is not expected to pose a significant risk to human health or the environment.

References

2,6-Di-Tert-Butyl-P-Cresol Screening Information Data Set (SIDS), Organization for Economic Cooperation and Development

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

Safety Data Sheet (SDS), VULKANOX BHT, LANXESS Corporation

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

NIOSH Pocket Guide to Chemical Hazards, 2,6-Di-Tert-Butyl-P-Cresol, U.S. National Library of Medicine and the National Institutes of Health

ToxNet Hazardous Substances 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

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