



Hydroquinone bis(2-Hydroxyethyl)Ether

Product Stewardship Summary

June 2009

Chemical Name:	Hydroquinone bis(2-hydroxyethyl)ether
Synonyms:	1,4-bis(2-hydroxyethoxy)benzene; 2,2'-p-phenylenedioxydiethanol; 2,2'-(1,4-phenylenedioxy)diethanol; p-bis(2-hydroxyethoxy)benzene
CAS Number:	104-38-1
CAS Name:	Hydroquinone bis(2-hydroxyethyl)ether
EC (EINECS) Number:	203-197-3

- *General Description.* Hydroquinone bis(2-hydroxyethyl)ether (HQEE) is a white solid with a melting temperature of 100 to 106°C. It is produced using hydroquinone and ethylene oxide and is used in polyurethane reactions as a chain extender.
- *Manufacture.* The product is manufactured by the reaction of ethylene oxide and hydroquinone.
- *Applications.* HQEE is a specialty elastomer.
- *Benefits.* This product imparts hardness and high temperature Resistance to polyurethane materials.
- *General Precautions.*

HQEE is a moderate skin and eye irritant. HQEE is considered to have low toxicity from acute oral and dermal exposure. No data exists to define its acute inhalation toxicity, but, based on the toxicity from oral and dermal exposure, the toxicity from this route of

exposure would be low. Damage to specific organs was not observed from acute exposure.

HQEE was investigated for its potential to produce damage to genetic material. In a series of in vitro and in vivo studies, HQEE was found to lack the ability to damage genetic material. Therefore, it is not mutagenic.

The toxicity from repeated exposure to HQEE is low. From this type of exposure, HQEE did not cause any treatment-related organ damage.

HQEE does not impair reproductive performance, fertility, or fetal development.

HQEE has low toxicity to fish, aquatic invertebrates, and aquatic plants.

- *Physical Precautions.* Product not known to be flammable, combustible, pyrophoric or explosive. Label directions should be followed.
- *Likelihood of Exposure.* This product is not sold to the individual consumer. Its uses are in the industrial workplace where exposures to humans and the environment are controlled through the engineering controls and personal protective equipment.
- *Risk Management.* The likelihood of risk to either the formulator using the concentrated chemical or the consumer using the products with diluted HQEE is low; however, label directions for proper use should be read carefully and followed.

For additional information, please visit our web site at www.archchemicals.com and click on "Contact Us".

This summary is intended to give general information about the chemical or categories of chemicals addressed. It is not intended to provide an in-depth discussion of all health and safety information. Additional information on the chemical is available through the applicable Material Safety Data Sheet which should be consulted before use of the chemical. This summary does not supplant or replace required regulatory and/or legal communication documents.

