

Glycol Ethers Guidance

(7/26/2005)

“Glycol Ethers” is a hazardous air pollutant defined in Iowa Administrative Code (567) rule 22.100 as follows:

567 IAC 22.100, definition of “hazardous air pollutant”:

Glycol Ethers², except CAS #111-76-2, ethylene glycol mono-butyl ether, also known as EGBE or 2-Butoxyethanol

²Includes mono- and di-ethers of ethylene glycol, diethylene glycol, and triethylene glycol $R(OCH_2CH_2)_n-OR'$ where $n=1, 2, \text{ or } 3$; $R=\text{alkyl or aryl groups}$; $R'=R, H, \text{ or groups which, when removed, yield glycol ethers with the structure } R(OCH_2CH_2)_n-OH$. Polymers are excluded from the glycol category.

There are literally thousands of compounds included in the glycol ethers category. The definition of glycol ethers in the Iowa Administrative Code is taken directly from 40 CFR 63.21, and is consistent with the definition for certain glycol ethers used in Toxics Release Inventory program. For this reason, the Iowa DNR suggests using the EPA document entitled “Toxics Release Inventory: List of Toxic Chemicals Within the Glycol Ethers Category (December 2000)” for a listing of glycol ethers. This document is available at <http://www.epa.gov/ttn/atw/glycol2000.pdf>.

Common Glycol Ethers*

Chemical Name	CAS Number
Diethylene glycol dimethyl ether	111-96-6
Diethylene glycol monobutyl ether acetate	124-17-4
Diethylene glycol monobutyl ether	112-34-5
Diethylene glycol monoethyl ether acetate	112-15-2
Diethylene glycol monoethyl ether	111-90-0
Diethylene glycol monohexyl ether	112-59-4
Diethylene glycol monomethyl ether acetate	629-38-9
Diethylene glycol monomethyl ether	111-77-3
Ethylene glycol dibutyl ether	112-48-1
Ethylene glycol diethyl ether	629-14-1
Ethylene glycol dimethyl ether	110-71-4
Ethylene glycol monoacetate	542-59-6
Ethylene glycol monobutyl ether acetate	112-07-2
Ethylene glycol monoethyl ether acetate	111-15-9
Ethylene glycol monoethyl ether	110-80-5
Ethylene glycol monohexyl ether	112-25-4
Ethylene glycol monomethyl ether acetate	110-49-6
Ethylene glycol monomethyl ether	109-86-4
Ethylene glycol monoethyl ether	110-80-5
Ethylene glycol monophenyl ether	122-99-6
Ethylene glycol monopropyl ether	2807-30-9
Triethylene glycol	112-27-6
Triethylene glycol dimethyl ether	112-49-2
Triethylene glycol monoethyl ether	112-50-5
Triethylene glycol monomethyl ether	112-35-6

Delisted Glycol Ethers

Chemical Name	CAS Number
Ethylene glycol mono-butyl ether, also known as EGBE or 2-Butoxyethanol	111-76-2 Delisted 11/29/2004 (69FR69320)
Surfactant alcohol ethoxylates & their derivatives (SAED)	N/A Delisted 8/2/2000 (65FR47342)

*This is only a partial list of common glycol ethers. A more complete listing is available at: <http://www.epa.gov/ttn/atw/glycol2000.pdf>.