

# Diethylene glycol hexyl ether

<b>Other names:</b>	2-(2-hexyloxyethoxy)ethanol 2-(2-n-hexyloxyethoxy)ethanol 3,6-dioxa-1-dodecanol 3,6-dioxadodecanol-1 Diethylene glycol mono-n-hexyl ether Ethanol, 2-[2-(hexyloxy)ethoxy]- Hexol carbitol Hexylkarbitol NSC 403666 Ucar Filmer EHC diethylene glycol monohexyl ether diethylene glycol n-hexyl ether ethanol, 2-(2-hexyloxyethoxy)- hexyl carbitol n-Hexyl Carbitol n-hexoxyethoxyethanol
<b>Inchi:</b>	InChI=1S/C10H22O3/c1-2-3-4-5-7-12-9-10-13-8-6-11/h11H,2-10H2,1H3
<b>InchiKey:</b>	GZMAAYIALGURDQ-UHFFFAOYSA-N
<b>Formula:</b>	C10H22O3
<b>SMILES:</b>	CCCCCOCCOCCO
<b>Mol. weight [g/mol]:</b>	190.28
<b>CAS:</b>	112-59-4

## Physical Properties

Property code	Value	Unit	Source
gf	-313.50	kJ/mol	Joback Method
hf	-666.40	kJ/mol	Joback Method
hfus	28.12	kJ/mol	Joback Method
hvap	86.50	kJ/mol	NIST Webbook
log10ws	-1.45		Crippen Method
logp	1.592		Crippen Method
mcvol	169.370	ml/mol	McGowan Method
pc	2224.99	kPa	Joback Method
rinpol	1363.00		NIST Webbook
rinpol	1363.00		NIST Webbook
tb	533.20	K	NIST Webbook
tc	724.20	K	Joback Method

tf	307.74	K	Joback Method
vc	0.650	m <sup>3</sup> /kmol	Joback Method

## Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	433.45	J/mol×K	565.22	Joback Method
cpg	446.41	J/mol×K	591.72	Joback Method
cpg	458.93	J/mol×K	618.21	Joback Method
cpg	471.02	J/mol×K	644.71	Joback Method
cpg	482.66	J/mol×K	671.20	Joback Method
cpg	493.86	J/mol×K	697.70	Joback Method
cpg	504.63	J/mol×K	724.20	Joback Method
cpl	440.20	J/mol×K	337.15	Measurement and Prediction of Molar Heat Capacities of Liquid Polyoxyethylene Glycol Monoalkyl Ethers (CnEm)
cpl	412.00	J/mol×K	277.15	Measurement and Prediction of Molar Heat Capacities of Liquid Polyoxyethylene Glycol Monoalkyl Ethers (CnEm)
cpl	412.80	J/mol×K	279.15	Measurement and Prediction of Molar Heat Capacities of Liquid Polyoxyethylene Glycol Monoalkyl Ethers (CnEm)
cpl	413.60	J/mol×K	281.15	Measurement and Prediction of Molar Heat Capacities of Liquid Polyoxyethylene Glycol Monoalkyl Ethers (CnEm)
cpl	414.40	J/mol×K	283.15	Measurement and Prediction of Molar Heat Capacities of Liquid Polyoxyethylene Glycol Monoalkyl Ethers (CnEm)

cpl	415.30	J/mol×K	285.15	Measurement and Prediction of Molar Heat Capacities of Liquid Polyoxyethylene Glycol Monoalkyl Ethers (CnEm)
cpl	416.10	J/mol×K	287.15	Measurement and Prediction of Molar Heat Capacities of Liquid Polyoxyethylene Glycol Monoalkyl Ethers (CnEm)
cpl	417.00	J/mol×K	289.15	Measurement and Prediction of Molar Heat Capacities of Liquid Polyoxyethylene Glycol Monoalkyl Ethers (CnEm)
cpl	417.90	J/mol×K	291.15	Measurement and Prediction of Molar Heat Capacities of Liquid Polyoxyethylene Glycol Monoalkyl Ethers (CnEm)
cpl	418.70	J/mol×K	293.15	Measurement and Prediction of Molar Heat Capacities of Liquid Polyoxyethylene Glycol Monoalkyl Ethers (CnEm)
cpl	419.60	J/mol×K	295.15	Measurement and Prediction of Molar Heat Capacities of Liquid Polyoxyethylene Glycol Monoalkyl Ethers (CnEm)
cpl	420.50	J/mol×K	297.15	Measurement and Prediction of Molar Heat Capacities of Liquid Polyoxyethylene Glycol Monoalkyl Ethers (CnEm)

cpl	421.00	J/mol×K	298.15	Measurement and Prediction of Molar Heat Capacities of Liquid Polyoxyethylene Glycol Monoalkyl Ethers (CnEm)
cpl	421.40	J/mol×K	299.15	Measurement and Prediction of Molar Heat Capacities of Liquid Polyoxyethylene Glycol Monoalkyl Ethers (CnEm)
cpl	422.30	J/mol×K	301.15	Measurement and Prediction of Molar Heat Capacities of Liquid Polyoxyethylene Glycol Monoalkyl Ethers (CnEm)
cpl	423.20	J/mol×K	303.15	Measurement and Prediction of Molar Heat Capacities of Liquid Polyoxyethylene Glycol Monoalkyl Ethers (CnEm)
cpl	411.20	J/mol×K	275.15	Measurement and Prediction of Molar Heat Capacities of Liquid Polyoxyethylene Glycol Monoalkyl Ethers (CnEm)
cpl	425.10	J/mol×K	307.15	Measurement and Prediction of Molar Heat Capacities of Liquid Polyoxyethylene Glycol Monoalkyl Ethers (CnEm)
cpl	426.00	J/mol×K	309.15	Measurement and Prediction of Molar Heat Capacities of Liquid Polyoxyethylene Glycol Monoalkyl Ethers (CnEm)

cpl	427.00	J/mol×K	311.15	Measurement and Prediction of Molar Heat Capacities of Liquid Polyoxyethylene Glycol Monoalkyl Ethers (CnEm)
cpl	428.00	J/mol×K	313.15	Measurement and Prediction of Molar Heat Capacities of Liquid Polyoxyethylene Glycol Monoalkyl Ethers (CnEm)
cpl	428.90	J/mol×K	315.15	Measurement and Prediction of Molar Heat Capacities of Liquid Polyoxyethylene Glycol Monoalkyl Ethers (CnEm)
cpl	429.90	J/mol×K	317.15	Measurement and Prediction of Molar Heat Capacities of Liquid Polyoxyethylene Glycol Monoalkyl Ethers (CnEm)
cpl	430.90	J/mol×K	319.15	Measurement and Prediction of Molar Heat Capacities of Liquid Polyoxyethylene Glycol Monoalkyl Ethers (CnEm)
cpl	431.90	J/mol×K	321.15	Measurement and Prediction of Molar Heat Capacities of Liquid Polyoxyethylene Glycol Monoalkyl Ethers (CnEm)
cpl	432.90	J/mol×K	323.15	Measurement and Prediction of Molar Heat Capacities of Liquid Polyoxyethylene Glycol Monoalkyl Ethers (CnEm)

cpl	433.90	J/mol×K	325.15	Measurement and Prediction of Molar Heat Capacities of Liquid Polyoxyethylene Glycol Monoalkyl Ethers (CnEm)
cpl	434.90	J/mol×K	327.15	Measurement and Prediction of Molar Heat Capacities of Liquid Polyoxyethylene Glycol Monoalkyl Ethers (CnEm)
cpl	436.00	J/mol×K	329.15	Measurement and Prediction of Molar Heat Capacities of Liquid Polyoxyethylene Glycol Monoalkyl Ethers (CnEm)
cpl	437.00	J/mol×K	331.15	Measurement and Prediction of Molar Heat Capacities of Liquid Polyoxyethylene Glycol Monoalkyl Ethers (CnEm)
cpl	438.00	J/mol×K	333.15	Measurement and Prediction of Molar Heat Capacities of Liquid Polyoxyethylene Glycol Monoalkyl Ethers (CnEm)
cpl	439.10	J/mol×K	335.15	Measurement and Prediction of Molar Heat Capacities of Liquid Polyoxyethylene Glycol Monoalkyl Ethers (CnEm)
cpl	424.20	J/mol×K	305.15	Measurement and Prediction of Molar Heat Capacities of Liquid Polyoxyethylene Glycol Monoalkyl Ethers (CnEm)

cpl	441.20	J/mol×K	339.15	Measurement and Prediction of Molar Heat Capacities of Liquid Polyoxyethylene Glycol Monoalkyl Ethers (CnEm)
dvisc	0.0001078	Paxs	522.31	Joback Method
dvisc	0.0000675	Paxs	565.22	Joback Method
dvisc	0.0008075	Paxs	393.57	Joback Method
dvisc	0.0003616	Paxs	436.48	Joback Method
dvisc	0.0001870	Paxs	479.39	Joback Method
dvisc	0.0078855	Paxs	307.74	Joback Method
dvisc	0.0021950	Paxs	350.65	Joback Method
hvapt	62.70	kJ/mol	468.50	NIST Webbook
pvap	2.86	kPa	423.15	Vapor-Liquid Equilibrium for Propylene Glycol + 2-(2-Hexyloxyethoxy)ethanol and 1-Methyl-2-pyrrolidone + 1-Methoxypropan-2-ol
pvap	1.12	kPa	403.01	Vapor-Liquid Equilibrium for Propylene Glycol + 2-(2-Hexyloxyethoxy)ethanol and 1-Methyl-2-pyrrolidone + 1-Methoxypropan-2-ol
pvap	1.12	kPa	403.15	Vapor-Liquid Equilibrium for Propylene Glycol + 2-(2-Hexyloxyethoxy)ethanol and 1-Methyl-2-pyrrolidone + 1-Methoxypropan-2-ol
pvap	1.43	kPa	408.02	Vapor-Liquid Equilibrium for Propylene Glycol + 2-(2-Hexyloxyethoxy)ethanol and 1-Methyl-2-pyrrolidone + 1-Methoxypropan-2-ol

pvap	1.83	kPa	413.15	Vapor-Liquid Equilibrium for Propylene Glycol + 2-(2-Hexyloxyethoxy)ethanol and 1-Methyl-2-pyrrolidone + 1-Methoxypropan-2-ol
pvap	1.83	kPa	413.20	Vapor-Liquid Equilibrium for Propylene Glycol + 2-(2-Hexyloxyethoxy)ethanol and 1-Methyl-2-pyrrolidone + 1-Methoxypropan-2-ol
pvap	2.29	kPa	418.17	Vapor-Liquid Equilibrium for Propylene Glycol + 2-(2-Hexyloxyethoxy)ethanol and 1-Methyl-2-pyrrolidone + 1-Methoxypropan-2-ol
pvap	2.83	kPa	422.87	Vapor-Liquid Equilibrium for Propylene Glycol + 2-(2-Hexyloxyethoxy)ethanol and 1-Methyl-2-pyrrolidone + 1-Methoxypropan-2-ol
pvap	1.11	kPa	402.96	Vapor-Liquid Equilibrium for Propylene Glycol + 2-(2-Hexyloxyethoxy)ethanol and 1-Methyl-2-pyrrolidone + 1-Methoxypropan-2-ol
pvap	1.97	kPa	413.15	Vapor Pressures of Morpholine, Diethyl Methylmalonate, and Five Glycol Ethers at Temperatures up to 473.15 K
pvap	3.09	kPa	423.15	Vapor Pressures of Morpholine, Diethyl Methylmalonate, and Five Glycol Ethers at Temperatures up to 473.15 K



pvap	4.58	kPa	433.15	Vapor Pressures of Morpholine, Diethyl Methylmalonate, and Five Glycol Ethers at Temperatures up to 473.15 K
pvap	6.79	kPa	443.15	Vapor Pressures of Morpholine, Diethyl Methylmalonate, and Five Glycol Ethers at Temperatures up to 473.15 K
pvap	9.86	kPa	453.15	Vapor Pressures of Morpholine, Diethyl Methylmalonate, and Five Glycol Ethers at Temperatures up to 473.15 K
pvap	11.71	kPa	458.15	Vapor Pressures of Morpholine, Diethyl Methylmalonate, and Five Glycol Ethers at Temperatures up to 473.15 K
pvap	13.89	kPa	463.15	Vapor Pressures of Morpholine, Diethyl Methylmalonate, and Five Glycol Ethers at Temperatures up to 473.15 K
pvap	16.36	kPa	468.15	Vapor Pressures of Morpholine, Diethyl Methylmalonate, and Five Glycol Ethers at Temperatures up to 473.15 K
pvap	19.26	kPa	473.15	Vapor Pressures of Morpholine, Diethyl Methylmalonate, and Five Glycol Ethers at Temperatures up to 473.15 K
rhoI	924.35	kg/m3	288.15	Thermodynamic properties of mixtures containing alkoxypropanol and n-alkanol

rhoI	915.52	kg/m3	298.15	Thermodynamic properties of mixtures containing alkoxypropanol and n-alkanol
rhoI	906.64	kg/m3	308.15	Thermodynamic properties of mixtures containing alkoxypropanol and n-alkanol
rhoI	942.09	kg/m3	283.15	Density, Viscosity, and Refractive Index for Water + 2-Butoxyethanol and + 2-(2-Butoxyethoxy)ethanol at Various Temperatures
rhoI	938.05	kg/m3	288.15	Density, Viscosity, and Refractive Index for Water + 2-Butoxyethanol and + 2-(2-Butoxyethoxy)ethanol at Various Temperatures
rhoI	934.06	kg/m3	293.15	Density, Viscosity, and Refractive Index for Water + 2-Butoxyethanol and + 2-(2-Butoxyethoxy)ethanol at Various Temperatures
rhoI	926.08	kg/m3	303.15	Density, Viscosity, and Refractive Index for Water + 2-Butoxyethanol and + 2-(2-Butoxyethoxy)ethanol at Various Temperatures
rhoI	918.17	kg/m3	313.15	Density, Viscosity, and Refractive Index for Water + 2-Butoxyethanol and + 2-(2-Butoxyethoxy)ethanol at Various Temperatures

speedsl	1405.17	m/s	288.15	Densities, excess molar volumes, speeds of sound and isothermal compressibilities for {2-(2-hexyloxyethoxy)ethanol + n-alkanol} systems at temperatures between (288.15 and 308.15) K
speedsl	1337.65	m/s	308.15	Densities, Excess Molar Volumes, Speeds of Sound, and Isothermal Compressibilities for 2-(2-Hexyloxyethoxy)ethanol + n-Alkylamine at Temperatures Between 288.15 K and 308.15 K
speedsl	1371.14	m/s	298.15	Densities, excess molar volumes, speeds of sound and isothermal compressibilities for {2-(2-hexyloxyethoxy)ethanol + n-alkanol} systems at temperatures between (288.15 and 308.15) K
speedsl	1354.30	m/s	303.15	Densities, excess molar volumes, speeds of sound and isothermal compressibilities for {2-(2-hexyloxyethoxy)ethanol + n-alkanol} systems at temperatures between (288.15 and 308.15) K
speedsl	1337.65	m/s	308.15	Densities, excess molar volumes, speeds of sound and isothermal compressibilities for {2-(2-hexyloxyethoxy)ethanol + n-alkanol} systems at temperatures between (288.15 and 308.15) K

speedsl	1405.17	m/s	288.15	Densities, Excess Molar Volumes, Speeds of Sound, and Isothermal Compressibilities for 2-(2-Hexyloxyethoxy)ethanol + n-Alkylamine at Temperatures Between 288.15 K and 308.15 K
speedsl	1388.08	m/s	293.15	Densities, Excess Molar Volumes, Speeds of Sound, and Isothermal Compressibilities for 2-(2-Hexyloxyethoxy)ethanol + n-Alkylamine at Temperatures Between 288.15 K and 308.15 K
speedsl	1371.14	m/s	298.15	Densities, Excess Molar Volumes, Speeds of Sound, and Isothermal Compressibilities for 2-(2-Hexyloxyethoxy)ethanol + n-Alkylamine at Temperatures Between 288.15 K and 308.15 K
speedsl	1354.30	m/s	303.15	Densities, Excess Molar Volumes, Speeds of Sound, and Isothermal Compressibilities for 2-(2-Hexyloxyethoxy)ethanol + n-Alkylamine at Temperatures Between 288.15 K and 308.15 K
speedsl	1388.08	m/s	293.15	Densities, excess molar volumes, speeds of sound and isothermal compressibilities for {2-(2-hexyloxyethoxy)ethanol + n-alkanol} systems at temperatures between (288.15 and 308.15) K

# Sources

Mutual Solubility and Lower Critical Solution Temperature for Water + Glycol Ether Systems:	<a href="https://www.doi.org/10.1021/je049635u">https://www.doi.org/10.1021/je049635u</a>
McGowan Method:	<a href="http://pubs.acs.org/doi/abs/10.1021/ci9903071">http://pubs.acs.org/doi/abs/10.1021/ci9903071</a>
Density, Viscosity, and Refractive Index for Water + 2-Butoxyethanol and + 2-Butoxyethyl Equilibrium for Propylene Glycol + Hexyloxyethoxyethanol and 1,4-Dioxane	<a href="http://link.springer.com/article/10.1007/BF02311772">http://link.springer.com/article/10.1007/BF02311772</a>
Speeds of Sound and Isothermal Compressibilities for Molar Volumes, Speeds of Sound, and Isothermal Compressibilities for Molar Volumes, Speeds of Sound, and Isothermal Compressibilities for Molar Volumes	<a href="https://www.doi.org/10.1021/je900478c">https://www.doi.org/10.1021/je900478c</a>
Joback Method:	<a href="https://www.doi.org/10.1021/je034096z">https://www.doi.org/10.1021/je034096z</a>
Joback Method:	<a href="https://www.doi.org/10.1016/j.jct.2008.01.015">https://www.doi.org/10.1016/j.jct.2008.01.015</a>
Joback Method:	<a href="https://www.doi.org/10.1021/je800026p">https://www.doi.org/10.1021/je800026p</a>
Joback Method:	<a href="https://en.wikipedia.org/wiki/Joback_method">https://en.wikipedia.org/wiki/Joback_method</a>
Joback Method:	<a href="http://webbook.nist.gov/cgi/cbook.cgi?ID=C112594&amp;Units=SI">http://webbook.nist.gov/cgi/cbook.cgi?ID=C112594&amp;Units=SI</a>
Joback Method:	<a href="https://www.chemeo.com/doc/models/crippen_log10ws">https://www.chemeo.com/doc/models/crippen_log10ws</a>
Measurement and Prediction of Molar Heat Capacities of Liquid Polyalkyl Methacrylates and Monoalkyl Ether Dynamic Properties Calculation for Several Cases of Ether and Diethyl Methacrylate, and Five Glycol Ethers	<a href="https://www.doi.org/10.1021/acs.jced.5b00051">https://www.doi.org/10.1021/acs.jced.5b00051</a>
Measurement and Prediction of Molar Heat Capacities of Liquid Polyalkyl Methacrylates and Monoalkyl Ether Dynamic Properties Calculation for Several Cases of Ether and Diethyl Methacrylate, and Five Glycol Ethers	<a href="https://www.doi.org/10.1021/acs.jced.8b00936">https://www.doi.org/10.1021/acs.jced.8b00936</a>
Measurement and Prediction of Molar Heat Capacities of Liquid Polyalkyl Methacrylates and Monoalkyl Ether Dynamic Properties Calculation for Several Cases of Ether and Diethyl Methacrylate, and Five Glycol Ethers	<a href="https://www.doi.org/10.1021/je049627d">https://www.doi.org/10.1021/je049627d</a>
Measurement and Prediction of Molar Heat Capacities of Liquid Polyalkyl Methacrylates and Monoalkyl Ether Dynamic Properties Calculation for Several Cases of Ether and Diethyl Methacrylate, and Five Glycol Ethers	<a href="https://www.doi.org/10.1016/j.fluid.2008.02.005">https://www.doi.org/10.1016/j.fluid.2008.02.005</a>
Measurement and Prediction of Molar Heat Capacities of Liquid Polyalkyl Methacrylates and Monoalkyl Ether Dynamic Properties Calculation for Several Cases of Ether and Diethyl Methacrylate, and Five Glycol Ethers	

# Legend

<b>cpg:</b>	Ideal gas heat capacity
<b>cpl:</b>	Liquid phase heat capacity
<b>dvisc:</b>	Dynamic viscosity
<b>gf:</b>	Standard Gibbs free energy of formation
<b>hf:</b>	Enthalpy of formation at standard conditions
<b>hfus:</b>	Enthalpy of fusion at standard conditions
<b>hvap:</b>	Enthalpy of vaporization at standard conditions
<b>hvapt:</b>	Enthalpy of vaporization at a given temperature
<b>log10ws:</b>	Log10 of Water solubility in mol/l
<b>logp:</b>	Octanol/Water partition coefficient
<b>mcvol:</b>	McGowan's characteristic volume
<b>pc:</b>	Critical Pressure
<b>pvap:</b>	Vapor pressure
<b>rho:</b>	Liquid Density
<b>rinpol:</b>	Non-polar retention indices
<b>speedsl:</b>	Speed of sound in fluid
<b>tb:</b>	Normal Boiling Point Temperature
<b>tc:</b>	Critical Temperature
<b>tf:</b>	Normal melting (fusion) point
<b>vc:</b>	Critical Volume

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