

Ethanol, 2-[2-(2-butoxyethoxy)ethoxy]-

Other names:	2-(2-(2-butoxyethoxy)ethoxy)ethanol 2-[2-(2-Butoxyethoxy)ethoxy]ethanol 3,6,9-Trioxa-1-tridecanol 3,6,9-Trioxatridecan-1-ol 3,6,9-trioxatridecane-1-ol Dowanol TBAT NSC 164915 Poly-solv TB Triethylene glycol butyl ether Triethylene glycol mono-n-butyl ether Triethylene glycol n-butyl ether butoxytriethylene glycol butoxytriglycol triethylene glycol butyl ester triethylene glycol monobutyl ether triglycol monobutyl ether
Inchi:	InChI=1S/C10H22O4/c1-2-3-5-12-7-9-14-10-8-13-6-4-11/h11H,2-10H2,1H3
InchiKey:	COBPKKZHLDDMTB-UHFFFAOYSA-N
Formula:	C10H22O4
SMILES:	CCCCOC(O)CCOC(O)CC
Mol. weight [g/mol]:	206.28
CAS:	143-22-6

Physical Properties

Property code	Value	Unit	Source
gf	-418.50	kJ/mol	Joback Method
hf	-798.62	kJ/mol	Joback Method
hfus	29.31	kJ/mol	Joback Method
hvap	61.76	kJ/mol	Joback Method
log10ws	-0.53		Crippen Method
logp	0.829		Crippen Method
mcvol	175.240	ml/mol	McGowan Method
pc	2189.73	kPa	Joback Method
rinpol	1475.60		NIST Webbook
rinpol	1479.00		NIST Webbook
rinpol	1464.00		NIST Webbook
tb	587.64	K	Joback Method

tc	747.06	K	Joback Method
tf	225.55	K	NIST Webbook
vc	0.668	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	530.95	J/mol×K	747.06	Joback Method
cpg	460.02	J/mol×K	587.64	Joback Method
cpg	472.93	J/mol×K	614.21	Joback Method
cpg	485.41	J/mol×K	640.78	Joback Method
cpg	497.46	J/mol×K	667.35	Joback Method
cpg	509.07	J/mol×K	693.92	Joback Method
cpg	520.24	J/mol×K	720.49	Joback Method
dvisc	0.0029780	Paxs	333.15	Density and Viscosity of the Binary Mixture of Triethylene Glycol Monobutyl Ether + Water from (293.15 to 333.15) K at Atmospheric Pressure
dvisc	0.0092820	Paxs	293.15	Density and Viscosity of the Binary Mixture of Triethylene Glycol Monobutyl Ether + Water from (293.15 to 333.15) K at Atmospheric Pressure
dvisc	0.0065280	Paxs	303.15	Density and Viscosity of the Binary Mixture of Triethylene Glycol Monobutyl Ether + Water from (293.15 to 333.15) K at Atmospheric Pressure

dvisc	0.0049790	Paxs	313.15	Density and Viscosity of the Binary Mixture of Triethylene Glycol Monobutyl Ether + Water from (293.15 to 333.15) K at Atmospheric Pressure
dvisc	0.0037690	Paxs	323.15	Density and Viscosity of the Binary Mixture of Triethylene Glycol Monobutyl Ether + Water from (293.15 to 333.15) K at Atmospheric Pressure
rfi	1.43973		298.15	Excess molar volumes and excess molar enthalpies of the binary mixtures of 1,2-dichloropropane with di- and triethylene glycol mono-alkyl ethers at T=298.15K

Sources

Excess molar volumes and excess molar enthalpies of the binary mixtures Crippen Method:
1,2-dichloropropane with di- and triethylene glycol mono-alkyl ethers at T=298.15K:
Thermodynamic Properties Calculation Solubility Study of Methane and Ethane by Promising Physical Solvents for Natural Gas Viscosity of One-Pot: Mixture of Triethylene Glycol
Method: Water from (293.15 to 333.15) K at Atmospheric Pressure:
Crippen Method:

- <https://www.doi.org/10.1016/j.fluid.2009.06.018>
- <http://pubs.acs.org/doi/abs/10.1021/ci990307l>
- <https://www.doi.org/10.1021/acs.jced.8b00936>
- <https://www.doi.org/10.1021/je050172h>
- <https://www.doi.org/10.1021/je900510x>
- <http://link.springer.com/article/10.1007/BF02311772>
- https://www.chemeo.com/doc/models/crippen_log10ws
- https://en.wikipedia.org/wiki/Joback_method
- <http://webbook.nist.gov/cgi/cbook.cgi?ID=C143226&Units=SI>

Legend

cpg: Ideal gas heat capacity

dvisc:	Dynamic viscosity
gf:	Standard Gibbs free energy of formation
hf:	Enthalpy of formation at standard conditions
hfus:	Enthalpy of fusion at standard conditions
hvap:	Enthalpy of vaporization at standard conditions
log10ws:	Log10 of Water solubility in mol/l
logp:	Octanol/Water partition coefficient
mcvol:	McGowan's characteristic volume
pc:	Critical Pressure
rfi:	Refractive Index
rinpol:	Non-polar retention indices
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume

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