

Diethylene glycol, mono-(2,5-dichlorophenyl) ether

Inchi:	InChI=1S/C10H12Cl2O3/c11-8-1-2-9(12)10(7-8)15-6-5-14-4-3-13/h1-2,7,13H,3-6H2
InchiKey:	WTIUVRSTVZQVCY-UHFFFAOYSA-N
Formula:	C10H12Cl2O3
SMILES:	OCCOCCOc1cc(Cl)ccc1Cl
Mol. weight [g/mol]:	251.11
CAS:	116435-12-2

Physical Properties

Property code	Value	Unit	Source
gf	-244.21	kJ/mol	Joback Method
hf	-484.29	kJ/mol	Joback Method
hfus	29.78	kJ/mol	Joback Method
hvap	71.72	kJ/mol	Joback Method
log10ws	-2.57		Crippen Method
logp	2.381		Crippen Method
mcvol	170.090	ml/mol	McGowan Method
pc	2790.61	kPa	Joback Method
tb	676.72	K	Joback Method
tc	876.11	K	Joback Method
tf	419.04	K	Joback Method
vc	0.640	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	407.25	J/molxK	676.72	Joback Method
cpg	417.55	J/molxK	709.95	Joback Method
cpg	427.27	J/molxK	743.18	Joback Method
cpg	436.41	J/molxK	776.42	Joback Method
cpg	444.97	J/molxK	809.65	Joback Method
cpg	452.95	J/molxK	842.88	Joback Method
cpg	460.35	J/molxK	876.11	Joback Method
dvisc	0.0009377	Paxs	419.04	Joback Method
dvisc	0.0004324	Paxs	461.99	Joback Method

dvisc	0.0002274	Paxs	504.93	Joback Method
dvisc	0.0001323	Paxs	547.88	Joback Method
dvisc	0.0000833	Paxs	590.83	Joback Method
dvisc	0.0000558	Paxs	633.77	Joback Method
dvisc	0.0000394	Paxs	676.72	Joback Method

Sources

Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws
Joback Method:	https://en.wikipedia.org/wiki/Joback_method
McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C116435122&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci9903071

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
mccvol:	McGowan's characteristic volume
pc:	Critical Pressure
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume

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