Benzhydryl 2-chloroethyl ether

Other names: Benzhydryl «beta»-chloroethyl ether
Benzene, 1,1'-[(2-chloroethoxy)methylene]bis-
Inchi: InChI=1S/C15H15ClO/c16-11-12-17-15(13-7-3-1-4-8-13)14-9-5-2-6-10-14/h1-10,15H,11-
InchiKey: ZNVASENTCOLNJT-UHFFFAOYSA-N
Formula: C15H15ClO
SMILES: ClCCOC(c1ccccc1)c1ccccc1
Mol. weight [g/mol]: 246.73
CAS: 32669-06-0

Physical Properties

Property code	Value	Unit	Source
gf	180.87	kJ/mol	Joback Method
hf	-33.11	kJ/mol	Joback Method
hfus	24.55	kJ/mol	Joback Method
hvap	59.94	kJ/mol	Joback Method
log10ws	-4.11		Crippen Method
logp	4.031		Crippen Method
mcvol	192.800	ml/mol	McGowan Method
pc	2398.22	kPa	Joback Method
tb	655.37	K	Joback Method
tc	894.73	K	Joback Method
tf	348.80	K	Joback Method
vc	0.721	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	476.93	J/mol×K	655.37	Joback Method
cpg	493.67	J/mol×K	695.26	Joback Method
cpg	509.11	J/mol×K	735.16	Joback Method
cpg	523.32	J/mol×K	775.05	Joback Method
cpg	536.36	J/mol×K	814.95	Joback Method
cpg	548.30	J/mol×K	854.84	Joback Method
cpg	559.19	J/mol×K	894.73	Joback Method

dvisc	0.0019891	Pa×s	348.80	Joback Method
dvisc	0.0009146	Pa×s	399.89	Joback Method
dvisc	0.0005015	Pa×s	450.99	Joback Method
dvisc	0.0003108	Pa×s	502.09	Joback Method
dvisc	0.0002104	Pa×s	553.18	Joback Method
dvisc	0.0001521	Pa×s	604.27	Joback Method
dvisc	0.0001157	Pa×s	655.37	Joback Method

Pressure Dependent Properties

Property code	Value	Unit	Pressure [kPa]	Source
tbrp	448.50 ± 1.50	K	0.50	NIST Webbook

Sources

McGowan Method: http://link.springer.com/article/10.1007/BF02311772
NIST Webbook: http://webbook.nist.gov/cgi/cbook.cgi?ID=C32669060&Units=SI
Crippen Method: http://pubs.acs.org/doi/abs/10.1021/ci990307l
Crippen Method: https://www.chemeo.com/doc/models/crippen_log10ws
Joback Method: https://en.wikipedia.org/wiki/Joback_method

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
tb: Normal Boiling Point Temperature
tbrp: Boiling point at reduced pressure

tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume