Butylamine, n,n-bis-(2,3-epoxypropyl)-

Inchi: InChI=1S/C10H19NO2/c1-2-3-4-11(5-9-7-12-9)6-10-8-13-10/h9-10H,2-8H2,1H3
InchiKey: LJDKIFXJERTLMR-UHFFFAOYSA-N
Formula: C10H19NO2
SMILES: CCCCN(CC1CO1)CC1CO1
Mol. weight [g/mol]: 185.26
CAS: 4856-88-6

Physical Properties

Property code	Value	Unit	Source
gf	93.36	kJ/mol	Joback Method
hf	-300.60	kJ/mol	Joback Method
hfus	36.90	kJ/mol	Joback Method
hvap	48.74	kJ/mol	Joback Method
log10ws	-0.77		Crippen Method
logp	0.886		Crippen Method
mcvol	151.760	ml/mol	McGowan Method
pc	2662.52	kPa	Joback Method
tb	508.02	K	Joback Method
tc	695.01	K	Joback Method
tf	323.95	K	Joback Method
vc	0.570	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	388.03	J/mol×K	508.02	Joback Method
cpg	405.09	J/mol×K	539.18	Joback Method
cpg	421.14	J/mol×K	570.35	Joback Method
cpg	436.25	J/mol×K	601.51	Joback Method
cpg	450.47	J/mol×K	632.68	Joback Method
cpg	463.86	J/mol×K	663.84	Joback Method
cpg	476.48	J/mol×K	695.01	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=C4856886&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l

Legend

cpg:	Ideal gas heat capacity
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
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume

Latest version available from:

https://www.chemeo.com/cid/90-988-6/Butylamine-n-n-bis-2-3-epoxypropyl.pdf

Generated by Cheméo on 2024-10-12 04:45:29.436756288 +0000 UTC m=+3289192.073725548.

Cheméo (https://www.chemeo.com) is the biggest free database of chemical and physical data for the process industry.