Trioxa-1,13-tridecanediamine,4,7,10-

Other names: 3,3'-oxybis(ethyleneoxy)bis(propylamine)
Inchi: InChI=1S/C10H24N2O3/c11-3-1-5-13-7-9-15-10-8-14-6-2-4-12/h1-12H2
InchiKey: JCEZOHLWDIONSP-UHFFFAOYSA-N
Formula: C10H24N2O3
SMILES: NCCCOCCOCCOCCCN
Mol. weight [g/mol]: 220.31
CAS: 4246-51-9

Physical Properties

Property code	Value	Unit	Source
gf	-148.78	kJ/mol	Joback Method
hf	-578.81	kJ/mol	Joback Method
hfus	35.61	kJ/mol	Joback Method
hvap	66.37	kJ/mol	Joback Method
log10ws	-0.14		Crippen Method
logp	-0.266		Crippen Method
mcvol	189.330	ml/mol	McGowan Method
pc	2235.52	kPa	Joback Method
tb	640.52	K	Joback Method
tc	822.26	K	Joback Method
tf	435.67	K	Joback Method
vc	0.708	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	530.56	J/mol×K	640.52	Joback Method
cpg	545.22	J/mol×K	670.81	Joback Method
cpg	559.25	J/mol×K	701.10	Joback Method
cpg	572.65	J/mol×K	731.39	Joback Method
cpg	585.40	J/mol×K	761.68	Joback Method
cpg	597.50	J/mol×K	791.97	Joback Method
cpg	608.96	J/mol×K	822.26	Joback Method

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C4246519&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
McGowan Method:	http://link.springer.com/article/10.1007/BF02311772

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