1-Methoxy-2,22-dimethyltetracosane

Inchi: InChI=1S/C27H56O/c1-5-26(2)23-21-19-17-15-13-11-9-7-6-8-10-12-14-16-18-20-22-24-2
InchiKey: LLQBSZBYWOAXHY-UHFFFAOYSA-N
Formula: C27H56O
SMILES: CCC(C)CCCCCCCCCCCCCCCCCCCCC(C)COC
Mol. weight [g/mol]: 396.73

Physical Properties

Property code	Value	Unit	Source
gf	66.58	kJ/mol	Joback Method
hf	-743.39	kJ/mol	Joback Method
hfus	59.83	kJ/mol	Joback Method
hvap	77.33	kJ/mol	Joback Method
log10ws	-9.73		Crippen Method
logp	9.727		Crippen Method
mcvol	397.160	ml/mol	McGowan Method
pc	688.53	kPa	Joback Method
rinpol	2743.00		NIST Webbook
rinpol	2743.00		NIST Webbook
tb	838.70	K	Joback Method
tc	1027.33	K	Joback Method
tf	386.28	K	Joback Method
vc	1.554	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1319.06	J/mol×K	838.70	Joback Method
cpg	1429.39	J/mol×K	995.89	Joback Method
cpg	1409.81	J/mol×K	964.45	Joback Method
cpg	1389.03	J/mol×K	933.01	Joback Method
cpg	1367.01	J/mol×K	901.58	Joback Method
cpg	1343.70	J/mol×K	870.14	Joback Method
cpg	1447.82	J/mol×K	1027.33	Joback Method
dvisc	0.0000237	Pa×s	838.70	Joback Method

dvisc	0.0000340	Pa×s	763.30	Joback Method
dvisc	0.0000527	Pa×s	687.89	Joback Method
dvisc	0.0000909	Pa×s	612.49	Joback Method
dvisc	0.0001830	Pa×s	537.09	Joback Method
dvisc	0.0004627	Pa×s	461.68	Joback Method
dvisc	0.0016806	Pa×s	386.28	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=R547154&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
rinpol:	Non-polar retention indices
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume