1-Methoxy-2,14,18-trimethylpentacosane

Inchi: InChI=1S/C28H58O/c1-6-7-8-16-20-26(2)23-19-24-27(3)21-17-14-12-10-9-11-13-15-18-2
InchiKey: ZQYZHPCBLFRFRW-UHFFFAOYSA-N
Formula: C28H58O
SMILES: CCCCCCC(C)CCCC(C)CCCCCCCCCCCC(C)COC
Mol. weight [g/mol]: 410.76

Physical Properties

Property code	Value	Unit	Source
gf	72.56	kJ/mol	Joback Method
hf	-769.31	kJ/mol	Joback Method
hfus	58.89	kJ/mol	Joback Method
hvap	79.17	kJ/mol	Joback Method
log10ws	-9.91		Crippen Method
logp	9.973		Crippen Method
mcvol	411.250	ml/mol	McGowan Method
pc	657.80	kPa	Joback Method
rinpol	2839.00		NIST Webbook
tb	861.14	K	Joback Method
tc	1055.60	K	Joback Method
tf	382.55	K	Joback Method
vc	1.603	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1385.67	J/mol×K	861.14	Joback Method
cpg	1498.04	J/mol×K	1023.19	Joback Method
cpg	1478.23	J/mol×K	990.78	Joback Method
cpg	1457.14	J/mol×K	958.37	Joback Method
cpg	1434.72	J/mol×K	925.96	Joback Method
cpg	1410.91	J/mol×K	893.55	Joback Method
cpg	1516.62	J/mol×K	1055.60	Joback Method
dvisc	0.0000187	Pa×s	861.14	Joback Method
dvisc	0.0000272	Pa×s	781.38	Joback Method

dvisc	0.0000433	Pa×s	701.61	Joback Method
dvisc	0.0000774	Pa×s	621.85	Joback Method
dvisc	0.0001644	Pa×s	542.08	Joback Method
dvisc	0.0004527	Pa×s	462.31	Joback Method
dvisc	0.0019020	Pa×s	382.55	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=R547070&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