Docosyl isopropyl ether

Inchi: InChI=1S/C25H52O/c1-4-5-6-7-8-9-10-11-12-13-14-15-16-17-18-19-20-21-22-23-24-26-2
InchiKey: CPBGIQAHVDNSMJ-UHFFFAOYSA-N
Formula: C25H52O
SMILES: CCCCCCCCCCCCCCCCCCCCCCCCOC(C)C
Mol. weight [g/mol]: 368.68

Physical Properties

Property code	Value	Unit	Source
gf	52.18	kJ/mol	Joback Method
hf	-696.83	kJ/mol	Joback Method
hfus	58.17	kJ/mol	Joback Method
hvap	73.27	kJ/mol	Joback Method
log10ws	-9.49		Crippen Method
logp	9.233		Crippen Method
mcvol	368.980	ml/mol	McGowan Method
pc	760.16	kPa	Joback Method
rinpol	2524.00		NIST Webbook
tb	793.38	K	Joback Method
tc	971.44	K	Joback Method
tf	378.74	K	Joback Method
vc	1.448	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1188.00	J/mol×K	793.38	Joback Method
cpg	1211.41	J/mol×K	823.06	Joback Method
cpg	1233.65	J/mol×K	852.73	Joback Method
cpg	1254.78	J/mol×K	882.41	Joback Method
cpg	1274.81	J/mol×K	912.09	Joback Method
cpg	1293.80	J/mol×K	941.76	Joback Method
cpg	1311.77	J/mol×K	971.44	Joback Method
dvisc	0.0017125	Pa×s	378.74	Joback Method
dvisc	0.0005418	Pa×s	447.85	Joback Method

dvisc	0.0002332	Pa×s	516.95	Joback Method
dvisc	0.0001224	Pa×s	586.06	Joback Method
dvisc	0.0000737	Pa×s	655.17	Joback Method
dvisc	0.0000488	Pa×s	724.27	Joback Method
dvisc	0.0000348	Pa×s	793.38	Joback Method

Sources

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=U406344&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l
Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws

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