Docosyl propyl ether

Inchi: InChI=1S/C25H52O/c1-3-5-6-7-8-9-10-11-12-13-14-15-16-17-18-19-20-21-22-23-25-26-2
InchiKey: DTTHOTGVFMIYFY-UHFFFAOYSA-N
Formula: C25H52O
SMILES: CCCCCCCCCCCCCCCCCCCCCCCOCCC
Mol. weight [g/mol]: 368.68

Physical Properties

Property code	Value	Unit	Source
gf	54.62	kJ/mol	Joback Method
hf	-691.55	kJ/mol	Joback Method
hfus	61.69	kJ/mol	Joback Method
hvap	73.65	kJ/mol	Joback Method
log10ws	-9.37		Crippen Method
logp	9.235		Crippen Method
mcvol	368.980	ml/mol	McGowan Method
pc	756.82	kPa	Joback Method
rinpol	2580.00		NIST Webbook
rinpol	2580.00		NIST Webbook
tb	793.82	K	Joback Method
tc	971.87	K	Joback Method
tf	393.74	K	Joback Method
vc	1.454	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1187.61	J/mol×K	793.82	Joback Method
cpg	1211.00	J/mol×K	823.49	Joback Method
cpg	1233.24	J/mol×K	853.17	Joback Method
cpg	1254.37	J/mol×K	882.84	Joback Method
cpg	1274.42	J/mol×K	912.52	Joback Method
cpg	1293.43	J/mol×K	942.19	Joback Method
cpg	1311.43	J/mol×K	971.87	Joback Method
dvisc	0.0013388	Pa×s	393.74	Joback Method

dvisc	0.0004804	Pa×s	460.42	Joback Method
dvisc	0.0002234	Pa×s	527.10	Joback Method
dvisc	0.0001234	Pa×s	593.78	Joback Method
dvisc	0.0000768	Pa×s	660.46	Joback Method
dvisc	0.0000522	Pa×s	727.14	Joback Method
dvisc	0.0000378	Pa×s	793.82	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=U406282&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l

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