

Nonyl octacosyl ether

Inchi: InChI=1S/C37H76O/c1-3-5-7-9-11-12-13-14-15-16-17-18-19-20-21-22-23-24-25-26-27-28
InchiKey: HXAXLWGNRAVNII-UHFFFAOYSA-N
Formula: C37H76O
SMILES: CCCCCCCCCCCCCCCCCCCCCCCCCCCCCOCCCCCCCC
Mol. weight [g/mol]: 537.00

Physical Properties

Property code	Value	Unit	Source
gf	155.66	kJ/mol	Joback Method
hf	-939.23	kJ/mol	Joback Method
hfus	92.77	kJ/mol	Joback Method
hvap	100.37	kJ/mol	Joback Method
log10ws	-14.40		Crippen Method
logp	13.916		Crippen Method
mvol	538.060	ml/mol	McGowan Method
pc	436.39	kPa	Joback Method
rinpol	3747.00		NIST Webbook
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tb	1068.38	K	Joback Method
tc	1393.61	K	Joback Method
tf	528.98	K	Joback Method
vc	2.126	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1999.53	J/molxK	1068.38	Joback Method
cpg	2153.52	J/molxK	1339.40	Joback Method
cpg	2128.55	J/molxK	1285.20	Joback Method
cpg	2101.02	J/molxK	1230.99	Joback Method
cpg	2070.58	J/molxK	1176.79	Joback Method
cpg	2036.87	J/molxK	1122.58	Joback Method
cpg	2176.29	J/molxK	1393.61	Joback Method
dvisc	0.0000059	Paxs	1068.38	Joback Method

dvisc	0.0000083	Paxs	978.48	Joback Method
dvisc	0.0000124	Paxs	888.58	Joback Method
dvisc	0.0000204	Paxs	798.68	Joback Method
dvisc	0.0000379	Paxs	708.78	Joback Method
dvisc	0.0000847	Paxs	618.88	Joback Method
dvisc	0.0002482	Paxs	528.98	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=U406382&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci9903071
Crippen Method:	https://www.cheméo.com/doc/models/crippen_log10ws
Joback Method:	https://en.wikipedia.org/wiki/Joback_method

Legend

cp_g:	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:	Log ₁₀ of Water solubility in mol/l
logp:	Octanol/Water partition coefficient
m_{cvol}:	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

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