3,7,11-Trimethylheptacosane

Inchi: InChI=1S/C30H62/c1-6-8-9-10-11-12-13-14-15-16-17-18-19-20-23-29(4)26-22-27-30(5)2
InchiKey: QVGGKRPICGQKFP-UHFFFAOYSA-N
Formula: C30H62
SMILES: CCCCCCCCCCCCCCCCC(C)CCCC(C)CCCC(C)CC
Mol. weight [g/mol]: 422.81

Physical Properties

Property code	Value	Unit	Source
gf	194.40	kJ/mol	Joback Method
hf	-678.37	kJ/mol	Joback Method
hfus	62.89	kJ/mol	Joback Method
hvap	81.21	kJ/mol	Joback Method
log10ws	-11.66		Crippen Method
logp	11.517		Crippen Method
mcvol	433.560	ml/mol	McGowan Method
pc	602.50	kPa	Joback Method
rinpol	2838.00		NIST Webbook
rinpol	2838.00		NIST Webbook
rinpol	2838.00		NIST Webbook
tb	884.48	K	Joback Method
tc	1086.59	K	Joback Method
tf	382.86	K	Joback Method
vc	1.698	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1483.06	J/mol×K	884.48	Joback Method
cpg	1602.47	J/mol×K	1052.90	Joback Method
cpg	1581.31	J/mol×K	1019.22	Joback Method
cpg	1558.87	J/mol×K	985.53	Joback Method
cpg	1535.07	J/mol×K	951.85	Joback Method
cpg	1509.83	J/mol×K	918.16	Joback Method
cpg	1622.43	J/mol×K	1086.59	Joback Method

dvisc	0.0000186	Pa×s	884.48	Joback Method
dvisc	0.0000272	Pa×s	800.88	Joback Method
dvisc	0.0000437	Pa×s	717.27	Joback Method
dvisc	0.0000795	Pa×s	633.67	Joback Method
dvisc	0.0001732	Pa×s	550.07	Joback Method
dvisc	0.0004992	Pa×s	466.46	Joback Method
dvisc	0.0022843	Pa×s	382.86	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=R505383&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