5,13-dimethyl-heptacosane

Inchi: InChI=1S/C29H60/c1-5-7-9-10-11-12-13-14-15-16-18-21-26-29(4)27-23-20-17-19-22-25-
InchiKey: YRGXULPOVOKDNA-UHFFFAOYSA-N
Formula: C29H60
SMILES: CCCCCCCCCCCCCCC(C)CCCCCCCC(C)CCCC
Mol. weight [g/mol]: 408.79

Physical Properties

Property code	Value	Unit	Source
gf	188.42	kJ/mol	Joback Method
hf	-652.45	kJ/mol	Joback Method
hfus	63.82	kJ/mol	Joback Method
hvap	79.37	kJ/mol	Joback Method
log10ws	-11.48		Crippen Method
logp	11.271		Crippen Method
mcvol	419.470	ml/mol	McGowan Method
pc	629.40	kPa	Joback Method
rinpol	2776.00		NIST Webbook
rinpol	2761.00		NIST Webbook
rinpol	2776.00		NIST Webbook
rinpol	2783.00		NIST Webbook
rinpol	2761.00		NIST Webbook
tb	862.04	K	Joback Method
tc	1057.60	K	Joback Method
tf	386.59	K	Joback Method
vc	1.647	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1415.45	J/mol×K	862.04	Joback Method
cpg	1532.42	J/mol×K	1025.01	Joback Method
cpg	1511.59	J/mol×K	992.41	Joback Method
cpg	1489.54	J/mol×K	959.82	Joback Method
cpg	1466.21	J/mol×K	927.23	Joback Method

cpg	1441.54	J/mol×K	894.63	Joback Method
cpg	1552.12	J/mol×K	1057.60	Joback Method
dvisc	0.0000236	Pa×s	862.04	Joback Method
dvisc	0.0000341	Pa×s	782.80	Joback Method
dvisc	0.0000534	Pa×s	703.56	Joback Method
dvisc	0.0000937	Pa×s	624.31	Joback Method
dvisc	0.0001936	Pa×s	545.07	Joback Method
dvisc	0.0005120	Pa×s	465.83	Joback Method
dvisc	0.0020179	Pa×s	386.59	Joback Method

Sources

McGowan Method: http://link.springer.com/article/10.1007/BF02311772
NIST Webbook: http://webbook.nist.gov/cgi/cbook.cgi?ID=R262096&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