Pentacosane, 2,6,10,14,18,22-hexamethyl

Inchi: InChI=1S/C31H64/c1-9-15-27(4)18-11-19-29(6)22-13-23-31(8)25-14-24-30(7)21-12-20-2
InchiKey: WSZVWBJWCXODEZ-UHFFFAOYSA-N
Formula: C31H64
SMILES: CCCC(C)CCCC(C)CCCC(C)CCCC(C)CCCC(C)CCCC(C)C
Mol. weight [g/mol]: 436.84

Physical Properties

Property code	Value	Unit	Source
gf	195.50	kJ/mol	Joback Method
hf	-714.85	kJ/mol	Joback Method
hfus	54.91	kJ/mol	Joback Method
hvap	82.27	kJ/mol	Joback Method
log10ws	-11.35		Crippen Method
logp	11.474		Crippen Method
mcvol	447.650	ml/mol	McGowan Method
pc	581.76	kPa	Joback Method
rinpol	2711.00		NIST Webbook
rinpol	2711.00		NIST Webbook
rinpol	2710.00		NIST Webbook
rinpol	2710.00		NIST Webbook
rinpol	2711.00		NIST Webbook
rinpol	2710.00		NIST Webbook
tb	906.04	K	Joback Method
tc	1112.65	K	Joback Method
tf	349.13	K	Joback Method
vc	1.736	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1551.78	J/mol×K	906.04	Joback Method
cpg	1671.84	J/mol×K	1078.22	Joback Method
cpg	1650.71	J/mol×K	1043.78	Joback Method
cpg	1628.22	J/mol×K	1009.35	Joback Method

cpg	1604.30	J/mol×K	974.91	Joback Method
cpg	1578.85	J/mol×K	940.48	Joback Method
cpg	1691.70	J/mol×K	1112.65	Joback Method
dvisc	0.0000121	Pa×s	906.04	Joback Method
dvisc	0.0000187	Pa×s	813.22	Joback Method
dvisc	0.0000324	Pa×s	720.40	Joback Method
dvisc	0.0000659	Pa×s	627.59	Joback Method
dvisc	0.0001713	Pa×s	534.77	Joback Method
dvisc	0.0006656	Pa×s	441.95	Joback Method
dvisc	0.0053237	Pa×s	349.13	Joback Method

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=R213831&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
McGowan Method:	http://link.springer.com/article/10.1007/BF02311772

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

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