Heneicosane, 2,6,10,15-tetramethyl

Inchi: InChI=1S/C25H52/c1-7-8-9-10-16-23(4)17-11-12-18-24(5)20-14-21-25(6)19-13-15-22(2)
InchiKey: VGVLUMQROZSZFT-UHFFFAOYSA-N
Formula: C25H52
SMILES: CCCCCCC(C)CCCCC(C)CCCC(C)CCCC(C)C
Mol. weight [g/mol]: 352.68

Physical Properties

Property code	Value	Unit	Source
gf	149.86	kJ/mol	Joback Method
hf	-580.45	kJ/mol	Joback Method
hfus	46.41	kJ/mol	Joback Method
hvap	69.69	kJ/mol	Joback Method
log10ws	-9.32		Crippen Method
logp	9.422		Crippen Method
mcvol	363.110	ml/mol	McGowan Method
pc	777.64	kPa	Joback Method
rinpol	2203.00		NIST Webbook
rinpol	2268.00		NIST Webbook
tb	769.64	K	Joback Method
tc	945.01	K	Joback Method
tf	311.51	K	Joback Method
vc	1.411	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1153.05	J/mol×K	769.64	Joback Method
cpg	1176.76	J/mol×K	798.87	Joback Method
cpg	1199.33	J/mol×K	828.10	Joback Method
cpg	1220.80	J/mol×K	857.33	Joback Method
cpg	1241.22	J/mol×K	886.55	Joback Method
cpg	1260.62	J/mol×K	915.78	Joback Method
cpg	1279.06	J/mol×K	945.01	Joback Method
dvisc	0.0078404	Pa×s	311.51	Joback Method

dvisc	0.0013230	Pa×s	387.87	Joback Method
dvisc	0.0004009	Pa×s	464.22	Joback Method
dvisc	0.0001702	Pa×s	540.58	Joback Method
dvisc	0.0000893	Pa×s	616.93	Joback Method
dvisc	0.0000540	Pa×s	693.29	Joback Method
dvisc	0.0000361	Pa×s	769.64	Joback Method

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=R47429&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