7,7-Diethylhenicosane

Inchi: InChI=1S/C25H52/c1-5-9-11-13-14-15-16-17-18-19-20-22-24-25(7-3,8-4)23-21-12-10-6-2
InchiKey: SUTSNHURULHSSI-UHFFFAOYSA-N
Formula: C25H52
SMILES: CCCCCCCCCCCCCCC(CC)(CC)CCCCCC
Mol. weight [g/mol]: 352.68

Physical Properties

Property code	Value	Unit	Source
gf	162.46	kJ/mol	Joback Method
hf	-568.08	kJ/mol	Joback Method
hfus	53.09	kJ/mol	Joback Method
hvap	69.95	kJ/mol	Joback Method
log10ws	-10.05		Crippen Method
logp	9.854		Crippen Method
mcvol	363.110	ml/mol	McGowan Method
pc	772.03	kPa	Joback Method
rinpol	2389.00		NIST Webbook
rinpol	2389.00		NIST Webbook
tb	768.17	K	Joback Method
tc	942.43	K	Joback Method
tf	373.93	K	Joback Method
vc	1.425	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1152.23	J/mol×K	768.17	Joback Method
cpg	1175.54	J/mol×K	797.21	Joback Method
cpg	1197.74	J/mol×K	826.26	Joback Method
cpg	1218.90	J/mol×K	855.30	Joback Method
cpg	1239.07	J/mol×K	884.35	Joback Method
cpg	1258.30	J/mol×K	913.39	Joback Method
cpg	1276.64	J/mol×K	942.43	Joback Method
dvisc	0.0022059	Pa×s	373.93	Joback Method

dvisc	0.0006908	Pa×s	439.64	Joback Method
dvisc	0.0002925	Pa×s	505.34	Joback Method
dvisc	0.0001510	Pa×s	571.05	Joback Method
dvisc	0.0000893	Pa×s	636.76	Joback Method
dvisc	0.0000583	Pa×s	702.46	Joback Method
dvisc	0.0000409	Pa×s	768.17	Joback Method

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=R415824&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