5-Ethyl-5-methylhenicosane

Inchi: InChI=1S/C24H50/c1-5-8-10-11-12-13-14-15-16-17-18-19-20-21-23-24(4,7-3)22-9-6-2/h5
InchiKey: QTRUUSFEKLCKER-UHFFFAOYSA-N
Formula: C24H50
SMILES: CCCCCCCCCCCCCCCCC(C)(CC)CCCC
Mol. weight [g/mol]: 338.65

Physical Properties

Property code	Value	Unit	Source
gf	154.04	kJ/mol	Joback Method
hf	-547.44	kJ/mol	Joback Method
hfus	50.50	kJ/mol	Joback Method
hvap	67.72	kJ/mol	Joback Method
log10ws	-9.63		Crippen Method
logp	9.464		Crippen Method
mcvol	349.020	ml/mol	McGowan Method
pc	814.93	kPa	Joback Method
rinpol	2313.00		NIST Webbook
tb	745.29	K	Joback Method
tc	916.52	K	Joback Method
tf	362.66	K	Joback Method
vc	1.369	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1088.46	J/mol×K	745.29	Joback Method
cpg	1111.31	J/mol×K	773.83	Joback Method
cpg	1133.11	J/mol×K	802.37	Joback Method
cpg	1153.90	J/mol×K	830.91	Joback Method
cpg	1173.73	J/mol×K	859.45	Joback Method
cpg	1192.65	J/mol×K	887.99	Joback Method
cpg	1210.70	J/mol×K	916.52	Joback Method
dvisc	0.0025379	Pa×s	362.66	Joback Method
dvisc	0.0007963	Pa×s	426.43	Joback Method

dvisc	0.0003378	Pa×s	490.20	Joback Method
dvisc	0.0001746	Pa×s	553.97	Joback Method
dvisc	0.0001034	Pa×s	617.75	Joback Method
dvisc	0.0000676	Pa×s	681.52	Joback Method
dvisc	0.0000475	Pa×s	745.29	Joback Method

Sources

Joback Method:	https://en.wikipedia.org/wiki/Joback_method
McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=R415626&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l
Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws

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