

2,6,10,14-tetramethyl-7-(3-methylbutyl)pentadecane

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

Physical Properties

Property code	Value	Unit	Source
gf	136.56	kJ/mol	Joback Method
hf	-570.37	kJ/mol	Joback Method
hfus	36.78	kJ/mol	Joback Method
hvap	66.69	kJ/mol	Joback Method
log10ws	-8.42		Crippen Method
logp	8.744		Crippen Method
mcvol	349.020	ml/mol	McGowan Method
pc	828.59	kPa	Joback Method
rinpol	2105.00		NIST Webbook
tb	745.88	K	Joback Method
tc	920.80	K	Joback Method
tf	270.24	K	Joback Method
vc	1.343	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1089.77	J/molxK	745.88	Joback Method
cpg	1113.43	J/molxK	775.03	Joback Method
cpg	1135.95	J/molxK	804.19	Joback Method
cpg	1157.37	J/molxK	833.34	Joback Method
cpg	1177.74	J/molxK	862.49	Joback Method
cpg	1197.08	J/molxK	891.65	Joback Method
cpg	1215.45	J/molxK	920.80	Joback Method
dvisc	0.0260903	Paxs	270.24	Joback Method
dvisc	0.0024940	Paxs	349.51	Joback Method

dvisc	0.0005680	Paxs	428.79	Joback Method
dvisc	0.0002052	Paxs	508.06	Joback Method
dvisc	0.0000976	Paxs	587.33	Joback Method
dvisc	0.0000554	Paxs	666.61	Joback Method
dvisc	0.0000355	Paxs	745.88	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=R261924&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

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