Tetracosane, 4-methyl

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

Physical Properties

Property code	Value	Unit	Source
gf	157.18	kJ/mol	Joback Method
hf	-564.61	kJ/mol	Joback Method
hfus	56.98	kJ/mol	Joback Method
hvap	70.86	kJ/mol	Joback Method
log10ws	-10.05		Crippen Method
logp	9.854		Crippen Method
mcvol	363.110	ml/mol	McGowan Method
pc	767.34	kPa	Joback Method
rinpol	2469.00		NIST Webbook
rinpol	2459.00		NIST Webbook
rinpol	2458.00		NIST Webbook
ripol	2453.00		NIST Webbook
tb	770.96	K	Joback Method
tc	944.71	K	Joback Method
tf	356.51	K	Joback Method
vc	1.429	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1151.89	J/mol×K	770.96	Joback Method
cpg	1258.59	J/mol×K	915.75	Joback Method
cpg	1239.27	J/mol×K	886.79	Joback Method
cpg	1218.99	J/mol×K	857.83	Joback Method
cpg	1197.69	J/mol×K	828.88	Joback Method

cpg	1175.34	J/mol×K	799.92	Joback Method
cpg	1276.97	J/mol×K	944.71	Joback Method
dvisc	0.0000463	Pa×s	770.96	Joback Method
dvisc	0.0000654	Pa×s	701.88	Joback Method
dvisc	0.0000995	Pa×s	632.81	Joback Method
dvisc	0.0001679	Pa×s	563.73	Joback Method
dvisc	0.0003280	Pa×s	494.66	Joback Method
dvisc	0.0007960	Pa×s	425.58	Joback Method
dvisc	0.0027240	Pa×s	356.51	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=R48211&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
ripol:	Polar retention indices
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume

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