Tetracontane, 17-methyl

Inchi: InChI=1S/C41H84/c1-4-6-8-10-12-14-16-18-20-21-22-23-24-25-26-28-30-32-34-36-38-40
InchiKey: OSGCMGMZLYRPJP-UHFFFAOYSA-N
Formula: C41H84
SMILES: CCCCCCCCCCCCCCCCCCCCCCCCC(C)CCCCCCCCCCCCCCCC
Mol. weight [g/mol]: 577.11

Physical Properties

Property code	Value	Unit	Source
gf	291.90	kJ/mol	Joback Method
hf	-894.85	kJ/mol	Joback Method
hfus	98.42	kJ/mol	Joback Method
hvap	106.47	kJ/mol	Joback Method
log10ws	-16.74		Crippen Method
logp	16.096		Crippen Method
mcvol	588.550	ml/mol	McGowan Method
pc	377.62	kPa	Joback Method
rinpol	4026.00		NIST Webbook
rinpol	4026.00		NIST Webbook
tb	1137.04	K	Joback Method
tc	1534.66	K	Joback Method
tf	536.83	K	Joback Method
vc	2.325	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	2246.87	J/mol×K	1137.04	Joback Method
cpg	2292.58	J/mol×K	1203.31	Joback Method
cpg	2333.99	J/mol×K	1269.58	Joback Method
cpg	2371.91	J/mol×K	1335.85	Joback Method
cpg	2407.18	J/mol×K	1402.12	Joback Method
cpg	2440.64	J/mol×K	1468.39	Joback Method
cpg	2473.12	J/mol×K	1534.66	Joback Method
dvisc	0.0002395	Pa×s	536.83	Joback Method

dvisc	0.0000699	Pa×s	636.86	Joback Method
dvisc	0.0000285	Pa×s	736.90	Joback Method
dvisc	0.0000144	Pa×s	836.93	Joback Method
dvisc	0.0000084	Pa×s	936.97	Joback Method
dvisc	0.0000055	Pa×s	1037.01	Joback Method
dvisc	0.0000038	Pa×s	1137.04	Joback Method

Sources

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
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=R584539&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l

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