

Octacosane, 2,6,10,14,19,23,27-heptamethyl

Inchi:	InChI=1S/C35H72/c1-29(2)17-12-21-33(7)25-14-23-31(5)19-10-11-20-32(6)24-15-27-35
InchiKey:	JUAROUYUCFEUCN-UHFFFAOYSA-N
Formula:	C35H72
SMILES:	CC(C)CCCC(C)CCCC(C)CCCC(C)CCCC(C)CCCC(C)CCCC(C)C
Mol. weight [g/mol]:	492.95

Physical Properties

Property code	Value	Unit	Source
gf	226.74	kJ/mol	Joback Method
hf	-802.69	kJ/mol	Joback Method
hfus	61.74	kJ/mol	Joback Method
hvap	90.79	kJ/mol	Joback Method
log10ws	-12.78		Crippen Method
logp	12.891		Crippen Method
mcvol	504.010	ml/mol	McGowan Method
pc	489.03	kPa	Joback Method
rinpol	3040.00		NIST Webbook
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tb	997.12	K	Joback Method
tc	1242.04	K	Joback Method
tf	379.21	K	Joback Method
vc	1.954	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1826.55	J/molxK	997.12	Joback Method
cpg	1958.86	J/molxK	1201.22	Joback Method
cpg	1936.08	J/molxK	1160.40	Joback Method
cpg	1911.63	J/molxK	1119.58	Joback Method
cpg	1885.33	J/molxK	1078.76	Joback Method
cpg	1857.03	J/molxK	1037.94	Joback Method
cpg	1980.12	J/molxK	1242.04	Joback Method
dvisc	0.0000058	Paxs	997.12	Joback Method

dvisc	0.0000090	Paxs	894.13	Joback Method
dvisc	0.0000159	Paxs	791.15	Joback Method
dvisc	0.0000330	Paxs	688.16	Joback Method
dvisc	0.0000887	Paxs	585.18	Joback Method
dvisc	0.0003644	Paxs	482.19	Joback Method
dvisc	0.0032241	Paxs	379.21	Joback Method

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=R214072&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci9903071
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

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