

Octacosane, 3,7-dimethyl

Inchi: InChI=1S/C30H62/c1-5-7-8-9-10-11-12-13-14-15-16-17-18-19-20-21-22-23-24-26-30(4)2
InchiKey: MOZJLRZFKXASFT-UHFFFAOYSA-N
Formula: C30H62
SMILES: CCCCCCCCCCCCCCCCCCCCCC(C)CCCC(C)CC
Mol. weight [g/mol]: 422.81

Physical Properties

Property code	Value	Unit	Source
gf	196.84	kJ/mol	Joback Method
hf	-673.09	kJ/mol	Joback Method
hfus	66.41	kJ/mol	Joback Method
hvap	81.60	kJ/mol	Joback Method
log10ws	-11.90		Crippen Method
logp	11.661		Crippen Method
mvol	433.560	ml/mol	McGowan Method
pc	600.14	kPa	Joback Method
rinpol	2911.00		NIST Webbook
rinpol	2911.00		NIST Webbook
tb	884.92	K	Joback Method
tc	1088.23	K	Joback Method
tf	397.86	K	Joback Method
vc	1.704	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1482.72	J/molxK	884.92	Joback Method
cpg	1509.65	J/molxK	918.81	Joback Method
cpg	1535.06	J/molxK	952.69	Joback Method
cpg	1559.02	J/molxK	986.58	Joback Method
cpg	1581.62	J/molxK	1020.46	Joback Method
cpg	1602.94	J/molxK	1054.35	Joback Method
cpg	1623.05	J/molxK	1088.23	Joback Method
dvisc	0.0017248	Paxs	397.86	Joback Method

dvisc	0.0004393	Paxs	479.04	Joback Method
dvisc	0.0001663	Paxs	560.21	Joback Method
dvisc	0.0000805	Paxs	641.39	Joback Method
dvisc	0.0000459	Paxs	722.57	Joback Method
dvisc	0.0000293	Paxs	803.74	Joback Method
dvisc	0.0000203	Paxs	884.92	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=R558986&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci9903071
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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