

2,12,20-Trimethyltriacontane

Inchi:	InChI=1S/C33H68/c1-6-7-8-9-10-13-17-22-27-32(4)29-24-19-15-20-25-30-33(5)28-23-18
InchiKey:	NDUCMLJZRHJPPD-UHFFFAOYSA-N
Formula:	C33H68
SMILES:	CCCCCCCCCCC(C)CCCCCCCC(C)CCCCCCCCCCC(C)C
Mol. weight [g/mol]:	464.89

Physical Properties

Property code	Value	Unit	Source
gf	219.66	kJ/mol	Joback Method
hf	-740.29	kJ/mol	Joback Method
hfus	70.66	kJ/mol	Joback Method
hvap	87.89	kJ/mol	Joback Method
log10ws	-12.91		Crippen Method
logp	12.687		Crippen Method
mcvol	475.830	ml/mol	McGowan Method
pc	525.57	kPa	Joback Method
rinpol	3123.00		NIST Webbook
rinpol	3123.00		NIST Webbook
tb	953.12	K	Joback Method
tc	1184.34	K	Joback Method
tf	416.67	K	Joback Method
vc	1.865	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1687.56	J/molxK	953.12	Joback Method
cpg	1717.27	J/molxK	991.66	Joback Method
cpg	1745.05	J/molxK	1030.19	Joback Method
cpg	1771.03	J/molxK	1068.73	Joback Method
cpg	1795.33	J/molxK	1107.26	Joback Method
cpg	1818.10	J/molxK	1145.80	Joback Method
cpg	1839.46	J/molxK	1184.34	Joback Method
dvisc	0.0013680	Paxs	416.67	Joback Method

dvisc	0.0003061	Paxs	506.08	Joback Method
dvisc	0.0001074	Paxs	595.49	Joback Method
dvisc	0.0000495	Paxs	684.89	Joback Method
dvisc	0.0000273	Paxs	774.30	Joback Method
dvisc	0.0000170	Paxs	863.71	Joback Method
dvisc	0.0000116	Paxs	953.12	Joback Method

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=R337789&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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