1,1,4a-Trimethyl-7,8a-(«alpha»-methylethano)-tetr

Inchi: InChI=1S/C20H34/c1-13-12-16-14(13)6-8-17-15(16)7-9-18-19(2,3)10-5-11-20(17,18)4/h1
InchiKey: OITZWLWAQWDBFQ-UHFFFAOYSA-N
Formula: C20H34
SMILES: CC1CC2C1CCC1C2CCC2C(C)(C)CCCC12C
Mol. weight [g/mol]: 274.48

Physical Properties

Property code	Value	Unit	Source
gf	270.30	kJ/mol	Joback Method
hf	-240.45	kJ/mol	Joback Method
hfus	23.38	kJ/mol	Joback Method
hvap	56.92	kJ/mol	Joback Method
log10ws	-5.84		Crippen Method
logp	5.911		Crippen Method
mcvol	249.220	ml/mol	McGowan Method
pc	1525.88	kPa	Joback Method
rinpol	1970.00		NIST Webbook
rinpol	1970.00		NIST Webbook
tb	682.84	K	Joback Method
tc	914.30	K	Joback Method
tf	403.68	K	Joback Method
vc	0.944	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	800.02	J/mol×K	682.84	Joback Method
cpg	829.05	J/mol×K	721.42	Joback Method
cpg	856.69	J/mol×K	759.99	Joback Method
cpg	883.29	J/mol×K	798.57	Joback Method
cpg	909.19	J/mol×K	837.15	Joback Method
cpg	934.72	J/mol×K	875.72	Joback Method
cpg	960.22	J/mol×K	914.30	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=R490325&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
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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