4a,8a-Ethanonaphthalene, octahydro-

Inchi: InChI=1S/C12H20/c1-2-6-12-8-4-3-7-11(12,5-1)9-10-12/h1-10H2
InchiKey: SJOVSYGHMRXULN-UHFFFAOYSA-N
Formula: C12H20
SMILES: C1CCC23CCCCC2(C1)CC3
Mol. weight [g/mol]: 164.29
CAS: 7620-88-4

Physical Properties

Property code	Value	Unit	Source
gf	192.84	kJ/mol	Joback Method
hf	-40.27	kJ/mol	Joback Method
hfus	1.27	kJ/mol	Joback Method
hvap	40.57	kJ/mol	Joback Method
log10ws	-4.05		Crippen Method
logp	3.901		Crippen Method
mcvol	147.360	ml/mol	McGowan Method
pc	3149.09	kPa	Joback Method
tb	512.14	K	Joback Method
tc	756.65	K	Joback Method
tf	320.30	K	Joback Method
vc	0.551	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	369.25	J/mol×K	512.14	Joback Method
cpg	392.88	J/mol×K	552.89	Joback Method
cpg	414.27	J/mol×K	593.64	Joback Method
cpg	433.83	J/mol×K	634.39	Joback Method
cpg	451.93	J/mol×K	675.14	Joback Method
cpg	468.98	J/mol×K	715.90	Joback Method
cpg	485.36	J/mol×K	756.65	Joback Method

Sources

Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l
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=C7620884&Units=SI

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
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume