

Spiro[8,8-dimethyl-1,2,3,4,5,6,7,8-octahydronaphthalene]

Inchi: InChI=1S/C16H24O/c1-15(2)8-3-5-12-11-16(10-7-13(12)15)9-4-6-14(16)17/h3-11H2,1-2H1
InchiKey: RPFZAYMUFIZFOI-UHFFFAOYSA-N
Formula: C16H24O
SMILES: CC1(C)CCCC2=C1CCC1(CCCC1=O)C2
Mol. weight [g/mol]: 232.36

Physical Properties

Property code	Value	Unit	Source
gf	90.43	kJ/mol	Joback Method
hf	-238.01	kJ/mol	Joback Method
hfus	7.39	kJ/mol	Joback Method
hvap	55.68	kJ/mol	Joback Method
log10ws	-4.85		Crippen Method
logp	4.416		Crippen Method
mcvol	200.990	ml/mol	McGowan Method
pc	2322.54	kPa	Joback Method
rinpol	1829.80		NIST Webbook
ripol	2329.80		NIST Webbook
tb	689.14	K	Joback Method
tc	947.32	K	Joback Method
tf	452.36	K	Joback Method
vc	0.752	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	599.33	J/mol×K	689.14	Joback Method
cpg	622.91	J/mol×K	732.17	Joback Method
cpg	645.52	J/mol×K	775.20	Joback Method
cpg	667.53	J/mol×K	818.23	Joback Method
cpg	689.32	J/mol×K	861.26	Joback Method
cpg	711.29	J/mol×K	904.29	Joback Method
cpg	733.79	J/mol×K	947.32	Joback Method

Sources

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=R260996&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l

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
rinpolar:	Non-polar retention indices
ripolar:	Polar retention indices
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume

Latest version available from:

<https://www.chemeo.com/cid/78-449-8/Spiro-8-8-dimethyl-1-2-3-4-5-6-7-8-octahydronaphthalene-3-2-cyclopentanone>

Generated by Cheméo on 2024-04-29 21:56:26.998466502 +0000 UTC m=+16717035.919043814.

Cheméo (<https://www.chemeo.com>) is the biggest free database of chemical and physical data for the process industry.