Bicyclo[2.2.1]heptan-2-one, 1,7,7-trimethyl-, oxime, (1R)-

Other names: (+)-Camphor oxime
Camphor, oxime, (1R)-
D-Camphor oxime
1,7,7-Trimethylbicyclo[2.2.1]heptan-2-one oxime
1,7,7-Trimethylbicyclo[2.2.1]heptan-2-one oxime, (R)-
(1R)-1,7,7-trimethylbicyclo[2.2.1]heptan-2-one oxime

Inchi: InChI=1S/C10H17NO/c1-9(2)7-4-5-10(9,3)8(6-7)11-12/h7,12H,4-6H2,1-3H3/b11-8+/t7?,1

InchiKey: OVFDEGGJFJECAT-MQPJBWICSA-N

Formula: C10H17NO

SMILES: CC12CCC(CC1=NO)C2(C)C

Mol. weight [g/mol]: 167.25

CAS: 2792-42-9

Physical Properties

Property code	Value	Unit	Source
chs	-6196.90	kJ/mol	NIST Webbook
hf	-211.35	kJ/mol	Joback Method
hfs	44.40	kJ/mol	NIST Webbook
hvap	56.06	kJ/mol	Joback Method
log10ws	-1.89		Crippen Method
logp	2.663		Crippen Method
mcvol	141.590	ml/mol	McGowan Method
pc	2853.57	kPa	Joback Method
tb	613.10	K	Joback Method
tc	827.62	K	Joback Method
tf	389.00 ± 1.00	K	NIST Webbook
tt	393.30 ± 1.50	K	NIST Webbook

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
hfust	2.10	kJ/mol	393.30	NIST Webbook
hfust	1.80	kJ/mol	389.00	NIST Webbook

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C2792429&Units=SI
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

Legend

chs:	Standard solid enthalpy of combustion
hf:	Enthalpy of formation at standard conditions
hfs:	Solid phase enthalpy of formation at standard conditions
hfust:	Enthalpy of fusion at a given temperature
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
tt:	Triple Point Temperature