

Cyclohexanone, 5-methyl-2-(1-methylethyl)-, trans-

Other names:	(2R,5S)-2-Isopropyl-5-methylcyclohexanone 2-Isopropyl-5-methylcyclohexanone, trans Cyclohexanone, 5-methyl-2-(1-methylethyl)-, trans-(./.-.)- DL-Menthone Menthan-3-one, trans Menthon Menthone Menthone G Menthone racemic Neomenthone p-Menthan-3-one, trans- p-Menthone trans-Menthan-3-one trans-Menthone trans-p-Menthan-3-one trans-p-Menthone
Inchi:	InChI=1S/C10H18O/c1-7(2)9-5-4-8(3)6-10(9)11/h7-9H,4-6H2,1-3H3/t8-,9+/m0/s1
InchiKey:	NFLGAXVYCFJBMK-DTGWKUNHWSA-N
Formula:	C10H18O
SMILES:	CC1CCC(C(C)C)C(=O)C1
Mol. weight [g/mol]:	154.25
CAS:	89-80-5

Physical Properties

Property code	Value	Unit	Source
gf	-74.97	kJ/mol	Joback Method
hf	-358.73	kJ/mol	Joback Method
hfus	10.55	kJ/mol	Joback Method
hvap	41.83	kJ/mol	Joback Method
log10ws	-2.35		Estimated Solubility Method
logp	2.648		Crippen Method
mcvol	142.470	ml/mol	McGowan Method
pc	2595.13	kPa	Joback Method
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ripol	1474.00		NIST Webbook
ripol	1492.00		NIST Webbook
ripol	1468.00		NIST Webbook
ripol	1474.00		NIST Webbook
tb	510.46	K	Joback Method
tc	728.68	K	Joback Method
tf	258.82	K	Joback Method
vc	0.528	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
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cpg	338.98	J/mol×K	510.46	Joback Method
cpg	358.78	J/mol×K	546.83	Joback Method
cpg	377.66	J/mol×K	583.20	Joback Method
cpg	395.62	J/mol×K	619.57	Joback Method
cpg	412.65	J/mol×K	655.94	Joback Method
cpg	428.75	J/mol×K	692.31	Joback Method
cpg	443.91	J/mol×K	728.68	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C89805&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci9903071
Joback Method:	https://en.wikipedia.org/wiki/Joback_method
Estimated Solubility Method:	http://pubs.acs.org/doi/suppl/10.1021/ci034243x/suppl_file/ci034243xsi20040112_053635.txt

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

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