

Cyclohexanemethanol, 4-(1-methylethyl)-, trans-

Other names:	p-Menthan-7-ol, trans-trans-p-Menthan-7-ol (4-Isopropylcyclohexyl)methanol, (E)-
Inchi:	InChI=1S/C10H20O/c1-8(2)10-5-3-9(7-11)4-6-10/h8-11H,3-7H2,1-2H3/t9-,10-
InchiKey:	KHWTYGFHPRQMP-MGCOHNPYSA-N
Formula:	C10H20O
SMILES:	CC(C)C1CCC(CO)CC1
Mol. weight [g/mol]:	156.27
CAS:	13674-19-6

Physical Properties

Property code	Value	Unit	Source
gf	-89.20	kJ/mol	Joback Method
hf	-373.26	kJ/mol	Joback Method
hfus	15.13	kJ/mol	Joback Method
hvap	54.27	kJ/mol	Joback Method
log10ws	-2.44		Crippen Method
logp	2.441		Crippen Method
mcvol	146.770	ml/mol	McGowan Method
pc	2752.67	kPa	Joback Method
ripol	1810.00		NIST Webbook
ripol	1819.00		NIST Webbook
ripol	1800.00		NIST Webbook
tb	534.82	K	Joback Method
tc	724.56	K	Joback Method
tf	251.42	K	Joback Method
vc	0.540	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	369.68	J/mol×K	534.82	Joback Method
cpg	386.79	J/mol×K	566.44	Joback Method
cpg	403.07	J/mol×K	598.07	Joback Method

cpg	418.54	J/molxK	629.69	Joback Method
cpg	433.23	J/molxK	661.32	Joback Method
cpg	447.15	J/molxK	692.94	Joback Method
cpg	460.33	J/molxK	724.56	Joback Method
dvisc	0.0567840	Paxs	251.42	Joback Method
dvisc	0.0092425	Paxs	298.65	Joback Method
dvisc	0.0024699	Paxs	345.89	Joback Method
dvisc	0.0009064	Paxs	393.12	Joback Method
dvisc	0.0004124	Paxs	440.35	Joback Method
dvisc	0.0002186	Paxs	487.59	Joback Method
dvisc	0.0001296	Paxs	534.82	Joback Method

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C13674196&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci9903071
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

Legend

cpg:	Ideal gas heat capacity
dvisc:	Dynamic viscosity
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
ripol:	Polar retention indices
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume

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