

Cyclohexanol, 5-methyl-2-(1-methylethyl)-, [1S-(1«alpha»,2«beta»,5«beta»)]-

Other names:	(1S,2R,5R)-(+)-Isomenthol (1S-(1«alpha»,2«beta»,5beta))-5-methyl-(1-isopropyl)cyclohexan-2-ol
Inchi:	InChI=1S/C10H20O/c1-7(2)9-5-4-8(3)6-10(9)11/h7-11H,4-6H2,1-3H3/t8-,9-,10+/m0/s1
InchiKey:	NOOLISFMXDJSKH-LPEHRKFASA-N
Formula:	C10H20O
SMILES:	CC1CCC(C(C)C)C(O)C1
Mol. weight [g/mol]:	156.27
CAS:	23283-97-8

Physical Properties

Property code	Value	Unit	Source
gf	-96.91	kJ/mol	Joback Method
hf	-393.60	kJ/mol	Joback Method
hfus	16.20	kJ/mol	Joback Method
hvap	53.96	kJ/mol	Joback Method
log10ws	-2.55		Crippen Method
logp	2.440		Crippen Method
mvol	146.770	ml/mol	McGowan Method
pc	2659.77	kPa	Joback Method
tb	491.80	K	NIST Webbook
tc	719.67	K	Joback Method
tf	247.18	K	Joback Method
vc	0.539	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	370.36	J/molxK	530.15	Joback Method
cpg	387.84	J/molxK	561.74	Joback Method
cpg	404.52	J/molxK	593.32	Joback Method
cpg	420.40	J/molxK	624.91	Joback Method
cpg	435.50	J/molxK	656.49	Joback Method
cpg	449.82	J/molxK	688.08	Joback Method
cpg	463.40	J/molxK	719.67	Joback Method

dvisc	0.0430815	Paxs	247.18	Joback Method
dvisc	0.0077902	Paxs	294.34	Joback Method
dvisc	0.0022592	Paxs	341.50	Joback Method
dvisc	0.0008847	Paxs	388.66	Joback Method
dvisc	0.0004244	Paxs	435.83	Joback Method
dvisc	0.0002350	Paxs	482.99	Joback Method
dvisc	0.0001446	Paxs	530.15	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=C23283978&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307i

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

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