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

Other names:	Menthol, cis-1,3,trans-1,4-
	Hexahydrothymol
	Menthacamphor
	Menthol
	Menthomenthol
	Peppermint camphor
	dl-Menthol
	p-Menthan-3-ol
	Cyclohexanol, 2-isopropyl-5-methyl-
	NCI-C50000
	5-Methyl-2-(1-methylethyl)cyclohexanol
	2-Isopropyl-5-methylcyclohexanol
	l-Menthol
	3-p-Menthanol
	5«alpha»-Methyl-2«beta»-(1«alpha»-methylethyl)cyclohexanol
	component of Dermoplast
	Fancol menthol
	Fisherman's friend lozenges
	Menthol terpine hydrate
	component of Minut-rub
	Racemic menthol
	component of Robitussin cough drops
	component of Sarna
	component of Theragesic
	Therapeutic mineral ice
	Cyclohexanol, 2-isopropyl-5-methyl-, (1«alpha»,2«beta»,5«alpha»)-
	2-Isopropyl-5-methylcyclohexanol, (1«alpha»,2«beta»,5«alpha»)-
	5-Methyl-2-(1-methylethyl)cyclohexanol, (1«alpha»,2«beta»,5«alpha»)-
	(.+/-.)-Menthol
	Cyclohexanol, 5-methyl-2-(1-methylethyl)-, (1R,2S,5R)-rel-
	NSC 2603
	Racementhol
	rac-Menthol
	Diterpene
	Cyclohexanol, 5-methyl-2-(1-methylethyl)-, (1«alpha»,2«beta»,5«alpha»)-(.+/-.)-
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-/m1/s1
InchiKey:	NOOLISFMXDJSKH-KXUCPTDWSA-N
Formula:	C10H20O
SMILES:	CC1CCC(C(C)C)C(O)C1
Mol. weight [g/mol]:	156.27

CAS: 15356-70-4

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
mcvol	146.770	ml/mol	McGowan Method
pc	2659.77	kPa	Joback Method
tb	530.15	K	Joback Method
tc	719.67	K	Joback Method
tf	247.18	K	Joback Method
vc	0.539	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	370.36	J/mol×K	530.15	Joback Method
cpg	387.84	J/mol×K	561.74	Joback Method
cpg	404.52	J/mol×K	593.32	Joback Method
cpg	420.40	J/mol×K	624.91	Joback Method
cpg	435.50	J/mol×K	656.49	Joback Method
cpg	449.82	J/mol×K	688.08	Joback Method
cpg	463.40	J/mol×K	719.67	Joback Method
dvisc	0.0430815	Pa×s	247.18	Joback Method
dvisc	0.0077902	Pa×s	294.34	Joback Method
dvisc	0.0022592	Pa×s	341.50	Joback Method
dvisc	0.0008847	Pa×s	388.66	Joback Method
dvisc	0.0004244	Pa×s	435.83	Joback Method
dvisc	0.0002350	Pa×s	482.99	Joback Method
dvisc	0.0001446	Pa×s	530.15	Joback Method

Pressure Dependent Properties

Property code	Value	Unit	Pressure [kPa]	Source
tbrp	376.70	K	1.00	NIST Webbook

Sources

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=C15356704&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l
Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws

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
tbrp:	Boiling point at reduced pressure
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume

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