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

Other names: Menthol, trans-1,3,trans-1,4-
Neo-Menthol

Inchi: InChI=1S/C10H20O/c1-7(2)9-5-4-8(3)6-10(9)11/h7-11H,4-6H2,1-3H3

InchiKey: NOOLISFMXDJSKH-UHFFFAOYSA-N

Formula: C10H20O

SMILES: CC1CCC(C(C)C)C(O)C1

Mol. weight [g/mol]: 156.27

CAS: 491-01-0

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
rinpol	1152.00		NIST Webbook
rinpol	1156.00		NIST Webbook
rinpol	1161.00		NIST Webbook
rinpol	1166.00		NIST Webbook
rinpol	1170.00		NIST Webbook
rinpol	1170.00		NIST Webbook
rinpol	1164.00		NIST Webbook
rinpol	1160.00		NIST Webbook
rinpol	1198.00		NIST Webbook
rinpol	1154.00		NIST Webbook
rinpol	1151.00		NIST Webbook
rinpol	1159.00		NIST Webbook
rinpol	1156.00		NIST Webbook
rinpol	1156.00		NIST Webbook
rinpol	1154.00		NIST Webbook
rinpol	1154.00		NIST Webbook
rinpol	1165.00		NIST Webbook
rinpol	1157.00		NIST Webbook

rinpol	1157.00		NIST Webbook
rinpol	1159.00		NIST Webbook
rinpol	1159.00		NIST Webbook
rinpol	1166.00		NIST Webbook
rinpol	1198.00		NIST Webbook
rinpol	1156.00		NIST Webbook
rinpol	1166.00		NIST Webbook
rinpol	1161.00		NIST Webbook
rinpol	1176.00		NIST Webbook
rinpol	1161.00		NIST Webbook
rinpol	1153.00		NIST Webbook
rinpol	1157.00		NIST Webbook
rinpol	1157.00		NIST Webbook
rinpol	1152.80		NIST Webbook
rinpol	1153.00		NIST Webbook
rinpol	1153.00		NIST Webbook
ripol	1604.00		NIST Webbook
ripol	1601.00		NIST Webbook
ripol	1574.00		NIST Webbook
ripol	1594.00		NIST Webbook
ripol	1599.00		NIST Webbook
ripol	1570.00		NIST Webbook
ripol	1586.00		NIST Webbook
ripol	1559.00		NIST Webbook
ripol	1590.00		NIST Webbook
ripol	1560.00		NIST Webbook
ripol	1604.00		NIST Webbook
ripol	1551.00		NIST Webbook
ripol	1559.00		NIST Webbook
ripol	1589.00		NIST Webbook
ripol	1589.00		NIST Webbook
ripol	1557.00		NIST Webbook
ripol	1570.00		NIST Webbook
ripol	1557.00		NIST Webbook
ripol	1601.00		NIST Webbook
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

Sources

NIST Webbook: http://webbook.nist.gov/cgi/cbook.cgi?ID=C491010&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
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
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