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

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-UTLUCORTSA-N
Formula: C10H20O
SMILES: CC1CCC(C(C)C)C(O)C1
Mol. weight [g/mol]: 156.27
CAS: 20747-49-3

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	370.80	K	1.30	NIST Webbook

Sources

McGowan Method: http://link.springer.com/article/10.1007/BF02311772
NIST Webbook: http://webbook.nist.gov/cgi/cbook.cgi?ID=C20747493&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

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