

Cyclohexane, (1,2-dimethylbutyl)-

Inchi:	InChI=1S/C12H24/c1-4-10(2)11(3)12-8-6-5-7-9-12/h10-12H,4-9H2,1-3H3
InchiKey:	KRDFMOZMKWQTEB-UHFFFAOYSA-N
Formula:	C12H24
SMILES:	CCC(C)C(C)C1CCCCC1
Mol. weight [g/mol]:	168.32
CAS:	61142-37-8

Physical Properties

Property code	Value	Unit	Source
gf	69.73	kJ/mol	Joback Method
hf	-247.25	kJ/mol	Joback Method
hfus	11.62	kJ/mol	Joback Method
hvap	41.96	kJ/mol	Joback Method
log10ws	-4.02		Crippen Method
logp	4.249		Crippen Method
mcvol	169.080	ml/mol	McGowan Method
pc	2165.35	kPa	Joback Method
tb	480.00 ± 4.00	K	NIST Webbook
tc	693.52	K	Joback Method
tf	202.38	K	Joback Method
vc	0.628	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	395.38	J/mol×K	492.63	Joback Method
cpg	494.59	J/mol×K	660.04	Joback Method
cpg	476.84	J/mol×K	626.56	Joback Method
cpg	458.08	J/mol×K	593.07	Joback Method
cpg	438.27	J/mol×K	559.59	Joback Method
cpg	417.38	J/mol×K	526.11	Joback Method
cpg	511.36	J/mol×K	693.52	Joback Method
dvisc	0.0002102	Pa×s	492.63	Joback Method
dvisc	0.0003020	Pa×s	444.25	Joback Method

dvisc	0.0004743	Pa×s	395.88	Joback Method
dvisc	0.0008443	Pa×s	347.50	Joback Method
dvisc	0.0018114	Pa×s	299.13	Joback Method
dvisc	0.0052173	Pa×s	250.75	Joback Method
dvisc	0.0249169	Pa×s	202.38	Joback Method

Sources

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
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C61142378&Units=SI

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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