1,1':3',1''-Tercyclopentane

Other names: Cyclopentane, 1,3-dicyclopentyl-
1,3-Dicyclopentylcyclopentane
Inchi: InChI=1S/C15H26/c1-2-6-12(5-1)14-9-10-15(11-14)13-7-3-4-8-13/h12-15H,1-11H2
InchiKey: VUIQTOLVCLYLAF-UHFFFAOYSA-N
Formula: C15H26
SMILES: C1CCC(C2CCC(C3CCCC3)C2)C1
Mol. weight [g/mol]: 206.37
CAS: 6051-40-7

Physical Properties

Property code	Value	Unit	Source
gf	177.36	kJ/mol	Joback Method
hf	-191.83	kJ/mol	Joback Method
hfus	17.48	kJ/mol	Joback Method
hvap	49.45	kJ/mol	Joback Method
log10ws	-4.82		Crippen Method
logp	4.783		Crippen Method
mcvol	189.630	ml/mol	McGowan Method
pc	2161.32	kPa	Joback Method
tb	583.77	K	Joback Method
tc	819.87	K	Joback Method
tf	287.27	K	Joback Method
vc	0.698	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	532.91	J/mol×K	583.77	Joback Method
cpg	561.58	J/mol×K	623.12	Joback Method
cpg	588.27	J/mol×K	662.47	Joback Method
cpg	613.08	J/mol×K	701.82	Joback Method
cpg	636.10	J/mol×K	741.17	Joback Method
cpg	657.43	J/mol×K	780.52	Joback Method
cpg	677.16	J/mol×K	819.87	Joback Method

cpl	363.60	J/mol×K	313.00	NIST Webbook
dvisc	0.0043320	Pa×s	287.27	Joback Method
dvisc	0.0023371	Pa×s	336.69	Joback Method
dvisc	0.0014766	Pa×s	386.10	Joback Method
dvisc	0.0010354	Pa×s	435.52	Joback Method
dvisc	0.0007805	Pa×s	484.94	Joback Method
dvisc	0.0006199	Pa×s	534.35	Joback Method
dvisc	0.0005120	Pa×s	583.77	Joback Method

Sources

NIST Webbook: http://webbook.nist.gov/cgi/cbook.cgi?ID=C6051407&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
cpl: Liquid phase 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

Cheméo (https://www.chemeo.com) is the biggest free database of chemical and physical data for the process industry.