Cyclopropane, octyl-

Other names: Octane, 1-cyclopropyl-
Octylcyclopropane
n-Octyl-cyclopropane
Inchi: InChI=1S/C11H22/c1-2-3-4-5-6-7-8-11-9-10-11/h11H,2-10H2,1H3
InchiKey: VFWTZFZJUAJMJB-UHFFFAOYSA-N
Formula: C11H22
SMILES: CCCCCCCCC1CC1
Mol. weight [g/mol]: 154.29
CAS: 1472-09-9

Physical Properties

Property code	Value	Unit	Source
gf	102.49	kJ/mol	Joback Method
hf	-197.57	kJ/mol	Joback Method
hfus	22.38	kJ/mol	Joback Method
hvap	39.99	kJ/mol	Joback Method
log10ws	-4.08		Crippen Method
logp	4.147		Crippen Method
mcvol	154.990	ml/mol	McGowan Method
pc	2175.46	kPa	Joback Method
rinpol	1075.00		NIST Webbook
rinpol	1115.70		NIST Webbook
rinpol	1075.00		NIST Webbook
rinpol	1115.70		NIST Webbook
tb	457.82	K	Joback Method
tc	631.95	K	Joback Method
tf	231.67	K	Joback Method
vc	0.609	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	346.33	J/mol×K	457.82	Joback Method
cpg	363.61	J/mol×K	486.84	Joback Method

cpg	380.10	J/mol×K	515.86	Joback Method
cpg	395.81	J/mol×K	544.89	Joback Method
cpg	410.79	J/mol×K	573.91	Joback Method
cpg	425.07	J/mol×K	602.93	Joback Method
cpg	438.67	J/mol×K	631.95	Joback Method
dvisc	0.0023914	Pa×s	231.67	Joback Method
dvisc	0.0014482	Pa×s	269.36	Joback Method
dvisc	0.0009920	Pa×s	307.05	Joback Method
dvisc	0.0007380	Pa×s	344.75	Joback Method
dvisc	0.0005821	Pa×s	382.44	Joback Method
dvisc	0.0004791	Pa×s	420.13	Joback Method
dvisc	0.0004071	Pa×s	457.82	Joback Method

Sources

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=C1472099&Units=SI
Crippen Method: http://pubs.acs.org/doi/abs/10.1021/ci990307l

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
tb: Normal Boiling Point Temperature
tc: Critical Temperature
tf: Normal melting (fusion) point
vc: Critical Volume