

1-ethyl-2-methyl Cyclododecane

Inchi:	InChI=1S/C15H30/c1-3-15-13-11-9-7-5-4-6-8-10-12-14(15)2/h14-15H,3-13H2,1-2H3
InchiKey:	IGEBPPWLYTWODA-UHFFFAOYSA-N
Formula:	C15H30
SMILES:	CCC1CCCCCCCCCCC1C
Mol. weight [g/mol]:	210.40

Physical Properties

Property code	Value	Unit	Source
gf	19.56	kJ/mol	Joback Method
hf	-355.91	kJ/mol	Joback Method
hfus	14.91	kJ/mol	Joback Method
hvap	50.14	kJ/mol	Joback Method
log10ws	-5.51		Crippen Method
logp	5.563		Crippen Method
mcvol	211.350	ml/mol	McGowan Method
pc	1832.54	kPa	Joback Method
rinpol	1488.00		NIST Webbook
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tb	583.10	K	Joback Method
tc	809.77	K	Joback Method
tf	240.83	K	Joback Method
vc	0.759	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	564.69	J/molxK	583.10	Joback Method
cpg	695.66	J/molxK	771.99	Joback Method
cpg	672.91	J/molxK	734.21	Joback Method
cpg	648.43	J/molxK	696.43	Joback Method
cpg	622.22	J/molxK	658.66	Joback Method
cpg	594.31	J/molxK	620.88	Joback Method
cpg	716.66	J/molxK	809.77	Joback Method
dvisc	0.0000441	Paxs	583.10	Joback Method

dvisc	0.0000753	Paxs	526.06	Joback Method
dvisc	0.0001466	Paxs	469.01	Joback Method
dvisc	0.0003429	Paxs	411.97	Joback Method
dvisc	0.0010547	Paxs	354.92	Joback Method
dvisc	0.0049882	Paxs	297.88	Joback Method
dvisc	0.0492514	Paxs	240.83	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=R333950&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci9903071

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

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