

5,5-diethylundecane

Inchi:	InChI=1S/C15H32/c1-5-9-11-12-14-15(7-3,8-4)13-10-6-2/h5-14H2,1-4H3
InchiKey:	JQCXFNVFAYZRBM-UHFFFAOYSA-N
Formula:	C15H32
SMILES:	CCCCCCC(CC)(CC)CCCC
Mol. weight [g/mol]:	212.41

Physical Properties

Property code	Value	Unit	Source
gf	78.26	kJ/mol	Joback Method
hf	-361.68	kJ/mol	Joback Method
hfus	27.19	kJ/mol	Joback Method
hvap	47.69	kJ/mol	Joback Method
log10ws	-5.86		Crippen Method
logp	5.953		Crippen Method
mvol	222.210	ml/mol	McGowan Method
pc	1435.89	kPa	Joback Method
rinpol	1407.00		NIST Webbook
tb	539.37	K	Joback Method
tc	706.24	K	Joback Method
tf	261.23	K	Joback Method
vc	0.865	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	560.41	J/molxK	539.37	Joback Method
cpg	580.10	J/molxK	567.18	Joback Method
cpg	598.92	J/molxK	594.99	Joback Method
cpg	616.91	J/molxK	622.80	Joback Method
cpg	634.09	J/molxK	650.62	Joback Method
cpg	650.51	J/molxK	678.43	Joback Method
cpg	666.20	J/molxK	706.24	Joback Method
dvisc	0.0075476	Paxs	261.23	Joback Method
dvisc	0.0024315	Paxs	307.59	Joback Method

dvisc	0.0010539	Paxs	353.94	Joback Method
dvisc	0.0005544	Paxs	400.30	Joback Method
dvisc	0.0003332	Paxs	446.66	Joback Method
dvisc	0.0002204	Paxs	493.01	Joback Method
dvisc	0.0001565	Paxs	539.37	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=R415542&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci9903071
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
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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