

2,2-Dimethylpropanoic acid, undec-2-enyl ester

Inchi:	InChI=1S/C16H30O2/c1-5-6-7-8-9-10-11-12-13-14-18-15(17)16(2,3)4/h12-13H,5-11,14H
InchiKey:	CUCZIHQHCUDPKZ-OUKQBFOZSA-N
Formula:	C16H30O2
SMILES:	CCCCCCCCC=CCOC(=O)C(C)(C)C
Mol. weight [g/mol]:	254.41

Physical Properties

Property code	Value	Unit	Source
gf	-67.02	kJ/mol	Joback Method
hf	-509.90	kJ/mol	Joback Method
hfus	32.77	kJ/mol	Joback Method
hvap	59.03	kJ/mol	Joback Method
log10ws	-4.99		Crippen Method
logp	4.883		Crippen Method
mvol	239.440	ml/mol	McGowan Method
pc	1438.07	kPa	Joback Method
rinpol	1643.00		NIST Webbook
rinpol	1643.00		NIST Webbook
tb	642.70	K	Joback Method
tc	822.27	K	Joback Method
tf	339.58	K	Joback Method
vc	0.924	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	657.63	J/molxK	642.70	Joback Method
cpg	675.70	J/molxK	672.63	Joback Method
cpg	692.88	J/molxK	702.56	Joback Method
cpg	709.20	J/molxK	732.49	Joback Method
cpg	724.71	J/molxK	762.42	Joback Method
cpg	739.43	J/molxK	792.35	Joback Method
cpg	753.41	J/molxK	822.27	Joback Method
dvisc	0.0025532	Paxs	339.58	Joback Method

dvisc	0.0010215	Paxs	390.10	Joback Method
dvisc	0.0005042	Paxs	440.62	Joback Method
dvisc	0.0002878	Paxs	491.14	Joback Method
dvisc	0.0001824	Paxs	541.66	Joback Method
dvisc	0.0001249	Paxs	592.18	Joback Method
dvisc	0.0000908	Paxs	642.70	Joback Method

Sources

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
McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=U299337&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
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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