

Isopropyl (E)-3-dodecenoate

Inchi:	InChI=1S/C15H28O2/c1-4-5-6-7-8-9-10-11-12-13-15(16)17-14(2)3/h11-12,14H,4-10,13H
InchiKey:	PZLCXFWZZXEVFQ-VAWYXSNFSA-N
Formula:	C15H28O2
SMILES:	CCCCCCCCC=CCC(=O)OC(C)C
Mol. weight [g/mol]:	240.38

Physical Properties

Property code	Value	Unit	Source
gf	-80.72	kJ/mol	Joback Method
hf	-485.79	kJ/mol	Joback Method
hfus	34.07	kJ/mol	Joback Method
hvap	57.71	kJ/mol	Joback Method
log10ws	-4.93		Crippen Method
logp	4.635		Crippen Method
mcvol	225.350	ml/mol	McGowan Method
pc	1535.46	kPa	Joback Method
ripol	1886.00		NIST Webbook
ripol	1886.00		NIST Webbook
tb	622.61	K	Joback Method
tc	798.28	K	Joback Method
tf	310.89	K	Joback Method
vc	0.874	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	600.96	J/mol×K	622.61	Joback Method
cpg	618.28	J/mol×K	651.89	Joback Method
cpg	634.82	J/mol×K	681.17	Joback Method
cpg	650.60	J/mol×K	710.44	Joback Method
cpg	665.65	J/mol×K	739.72	Joback Method
cpg	679.98	J/mol×K	769.00	Joback Method
cpg	693.62	J/mol×K	798.28	Joback Method
dvisc	0.0032461	Paxs	310.89	Joback Method

dvisc	0.0012311	Paxs	362.84	Joback Method
dvisc	0.0005952	Paxs	414.80	Joback Method
dvisc	0.0003383	Paxs	466.75	Joback Method
dvisc	0.0002154	Paxs	518.70	Joback Method
dvisc	0.0001488	Paxs	570.66	Joback Method
dvisc	0.0001094	Paxs	622.61	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=R488372&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

cp_g:	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:	Log ₁₀ of Water solubility in mol/l
logp:	Octanol/Water partition coefficient
m_{cvol}:	McGowan's characteristic volume
pc:	Critical Pressure
ripol:	Polar retention indices
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume

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