

Pentadecanoyl chloride

Inchi:	InChI=1S/C15H29ClO/c1-2-3-4-5-6-7-8-9-10-11-12-13-14-15(16)17/h2-14H2,1H3
InchiKey:	PQZWQGNQOVDTRF-UHFFFAOYSA-N
Formula:	C15H29ClO
SMILES:	CCCCCCCCCCCCCCC(=O)Cl
Mol. weight [g/mol]:	260.84
CAS:	17746-08-6

Physical Properties

Property code	Value	Unit	Source
gf	-65.43	kJ/mol	Joback Method
hf	-481.25	kJ/mol	Joback Method
hfus	40.40	kJ/mol	Joback Method
hvap	60.11	kJ/mol	Joback Method
log10ws	-6.03		Crippen Method
logp	5.843		Crippen Method
mvol	236.020	ml/mol	McGowan Method
pc	1443.54	kPa	Joback Method
tb	633.90	K	Joback Method
tc	806.02	K	Joback Method
tf	338.66	K	Joback Method
vc	0.930	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	625.39	J/mol×K	633.90	Joback Method
cpg	642.29	J/mol×K	662.59	Joback Method
cpg	658.43	J/mol×K	691.27	Joback Method
cpg	673.84	J/mol×K	719.96	Joback Method
cpg	688.53	J/mol×K	748.64	Joback Method
cpg	702.54	J/mol×K	777.33	Joback Method
cpg	715.88	J/mol×K	806.02	Joback Method
dvisc	0.0030641	Paxs	338.66	Joback Method
dvisc	0.0013743	Paxs	387.87	Joback Method

dvisc	0.0007384	Paxs	437.07	Joback Method
dvisc	0.0004499	Paxs	486.28	Joback Method
dvisc	0.0003002	Paxs	535.49	Joback Method
dvisc	0.0002145	Paxs	584.69	Joback Method
dvisc	0.0001614	Paxs	633.90	Joback Method

Sources

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=C17746086&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l
Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws

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

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