Tetradecanoic acid, 2-hydroxy-

Other names:	«alpha»-Hydroxymyristic acid
	2-Hydroxymyristic acid
	2-Hydroxytetradecanoic acid
	«alpha»-Hydroxy-n-tetradecylic acid
Inchi:	InChI=1S/C14H28O3/c1-2-3-4-5-6-7-8-9-10-11-12-13(15)14(16)17/h13,15H,2-12H2,1H3
InchiKey:	JYZJYKOZGGEXSX-UHFFFAOYSA-N
Formula:	C14H28O3
SMILES:	CCCCCCCCCCCCC(O)C(=O)O
Mol. weight [g/mol]:	244.37
CAS:	2507-55-3

Physical Properties

Property code	Value	Unit	Source
gf	-338.00	kJ/mol	Joback Method
hf	-754.61	kJ/mol	Joback Method
hfus	38.27	kJ/mol	Joback Method
hvap	86.47	kJ/mol	Joback Method
log10ws	-4.16		Crippen Method
logp	3.743		Crippen Method
mcvol	221.430	ml/mol	McGowan Method
pc	1878.90	kPa	Joback Method
tb	757.51	K	Joback Method
tc	931.23	K	Joback Method
tf	353.40 ± 1.00	K	NIST Webbook
vc	0.858	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	674.13	J/mol×K	757.51	Joback Method
cpg	687.64	J/mol×K	786.46	Joback Method
cpg	700.49	J/mol×K	815.42	Joback Method
cpg	712.70	J/mol×K	844.37	Joback Method
cpg	724.31	J/mol×K	873.32	Joback Method

cpg	735.32	J/mol×K	902.27	Joback Method
cpg	745.78	J/mol×K	931.23	Joback Method
dvisc	0.0035362	Pa×s	404.11	Joback Method
dvisc	0.0006559	Pa×s	463.01	Joback Method
dvisc	0.0001780	Pa×s	521.91	Joback Method
dvisc	0.0000629	Pa×s	580.81	Joback Method
dvisc	0.0000269	Pa×s	639.71	Joback Method
dvisc	0.0000133	Pa×s	698.61	Joback Method
dvisc	0.0000073	Pa×s	757.51	Joback Method

Sources

Crippen Method: http://pubs.acs.org/doi/abs/10.1021/ci990307l
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=C2507553&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
tb: Normal Boiling Point Temperature
tc: Critical Temperature
tf: Normal melting (fusion) point
vc: Critical Volume

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