cis,cis-11,14-Eicosadienoic acid

Other names:	cis-11,14-eicosadienoic acid
Inchi:	InChI=1S/C20H36O2/c1-2-3-4-5-6-7-8-9-10-11-12-13-14-15-16-17-18-19-20(21)22/h6-7,
InchiKey:	XSXIVVZCUAHUJO-HZJYTTRNSA-N
Formula:	C20H36O2
SMILES:	CCCCCC=CCC=CCCCCCCCCCC(=O)O
Mol. weight [g/mol]:	308.50
CAS:	5598-38-9

Physical Properties

Property code	Value	Unit	Source
gf	12.22	kJ/mol	Joback Method
hf	-486.50	kJ/mol	Joback Method
hfus	53.65	kJ/mol	Joback Method
hvap	83.45	kJ/mol	Joback Method
log10ws	-7.00		Crippen Method
logp	6.665		Crippen Method
mcvol	291.500	ml/mol	McGowan Method
pc	1206.47	kPa	Joback Method
tb	811.37	K	Joback Method
tc	995.30	K	Joback Method
tf	415.75	K	Joback Method
vc	1.141	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	904.58	J/mol×K	811.37	Joback Method
cpg	921.59	J/mol×K	842.03	Joback Method
cpg	937.79	J/mol×K	872.68	Joback Method
cpg	953.24	J/mol×K	903.34	Joback Method
cpg	968.00	J/mol×K	933.99	Joback Method
cpg	982.12	J/mol×K	964.65	Joback Method
cpg	995.65	J/mol×K	995.30	Joback Method
dvisc	0.0015649	Pa×s	415.75	Joback Method

dvisc	0.0004041	Pa×s	481.69	Joback Method
dvisc	0.0001446	Pa×s	547.62	Joback Method
dvisc	0.0000645	Pa×s	613.56	Joback Method
dvisc	0.0000337	Pa×s	679.50	Joback Method
dvisc	0.0000197	Pa×s	745.43	Joback Method
dvisc	0.0000126	Pa×s	811.37	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C5598389&Units=SI
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

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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