

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:	CCCCC=CCC=CCCCCCCCC(=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	m ³ /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	Paxs	415.75	Joback Method

dvisc	0.0004041	Paxs	481.69	Joback Method
dvisc	0.0001446	Paxs	547.62	Joback Method
dvisc	0.0000645	Paxs	613.56	Joback Method
dvisc	0.0000337	Paxs	679.50	Joback Method
dvisc	0.0000197	Paxs	745.43	Joback Method
dvisc	0.0000126	Paxs	811.37	Joback Method

Sources

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=C5598389&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l

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

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