Eicosen-1-ol, cis-9-

Other names: (Z)-Icos-9-en-1-ol
Inchi: InChI=1S/C20H40O/c1-2-3-4-5-6-7-8-9-10-11-12-13-14-15-16-17-18-19-20-21/h11-12,21
InchiKey: DJYWKXYRGAMLRE-QXMHVHEDSA-N
Formula: C20H40O
SMILES: CCCCCCCCCCC=CCCCCCCCCO
Mol. weight [g/mol]: 296.53
CAS: 112248-30-3

Physical Properties

Property code	Value	Unit	Source
gf	60.92	kJ/mol	Joback Method
hf	-491.14	kJ/mol	Joback Method
hfus	51.85	kJ/mol	Joback Method
hvap	76.75	kJ/mol	Joback Method
log10ws	-7.31		Crippen Method
logp	6.796		Crippen Method
mcvol	294.230	ml/mol	McGowan Method
pc	1115.57	kPa	Joback Method
rinpol	2261.10		NIST Webbook
tb	753.34	K	Joback Method
tc	924.82	K	Joback Method
tf	370.90	K	Joback Method
vc	1.155	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	903.37	J/mol×K	753.34	Joback Method
cpg	921.97	J/mol×K	781.92	Joback Method
cpg	939.74	J/mol×K	810.50	Joback Method
cpg	956.70	J/mol×K	839.08	Joback Method
cpg	972.91	J/mol×K	867.66	Joback Method
cpg	988.40	J/mol×K	896.24	Joback Method
cpg	1003.21	J/mol×K	924.82	Joback Method

dvisc	0.0034608	Pa×s	370.90	Joback Method
dvisc	0.0007435	Pa×s	434.64	Joback Method
dvisc	0.0002367	Pa×s	498.38	Joback Method
dvisc	0.0000977	Pa×s	562.12	Joback Method
dvisc	0.0000483	Pa×s	625.86	Joback Method
dvisc	0.0000272	Pa×s	689.60	Joback Method
dvisc	0.0000169	Pa×s	753.34	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=C112248303&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
rinpol:	Non-polar retention indices
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume

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