(Z)-6-Tridecenal

Inchi: InChI=1S/C13H24O/c1-2-3-4-5-6-7-8-9-10-11-12-13-14/h7-8,13H,2-6,9-12H2,1H3/b8-7+
InchiKey: QTNURDICRCEXFI-BQYQJAHWSA-N
Formula: C13H24O
SMILES: CCCCCCC=CCCCCC=O
Mol. weight [g/mol]: 196.33

Physical Properties

Property code	Value	Unit	Source
gf	39.28	kJ/mol	Joback Method
hf	-280.01	kJ/mol	Joback Method
hfus	31.92	kJ/mol	Joback Method
hvap	51.21	kJ/mol	Joback Method
log10ws	-4.40		Crippen Method
logp	4.272		Crippen Method
mcvol	191.300	ml/mol	McGowan Method
pc	1826.28	kPa	Joback Method
rinpol	1471.00		NIST Webbook
tb	549.66	K	Joback Method
tc	721.56	K	Joback Method
tf	273.19	K	Joback Method
vc	0.760	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	467.87	J/mol×K	549.66	Joback Method
cpg	483.80	J/mol×K	578.31	Joback Method
cpg	499.02	J/mol×K	606.96	Joback Method
cpg	513.56	J/mol×K	635.61	Joback Method
cpg	527.44	J/mol×K	664.26	Joback Method
cpg	540.69	J/mol×K	692.91	Joback Method
cpg	553.33	J/mol×K	721.56	Joback Method
dvisc	0.0045438	Pa×s	273.19	Joback Method
dvisc	0.0018476	Pa×s	319.27	Joback Method

dvisc	0.0009427	Pa×s	365.35	Joback Method
dvisc	0.0005592	Pa×s	411.43	Joback Method
dvisc	0.0003685	Pa×s	457.50	Joback Method
dvisc	0.0002621	Pa×s	503.58	Joback Method
dvisc	0.0001974	Pa×s	549.66	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=R285599&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
rinpol:	Non-polar retention indices
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume