(4E,6E)-4,6-hexadecadienal

Inchi: InChI=1S/C16H28O/c1-2-3-4-5-6-7-8-9-10-11-12-13-14-15-16-17/h10-13,16H,2-9,14-15H
InchiKey: MOVXSJUPKNHSBK-AQASXUMVSA-N
Formula: C16H28O
SMILES: CCCCCCCCCC=CC=CCCC=O
Mol. weight [g/mol]: 236.39

Physical Properties

Property code	Value	Unit	Source
gf	144.76	kJ/mol	Joback Method
hf	-224.71	kJ/mol	Joback Method
hfus	39.89	kJ/mol	Joback Method
hvap	57.85	kJ/mol	Joback Method
log10ws	-5.51		Crippen Method
logp	5.219		Crippen Method
mcvol	229.270	ml/mol	McGowan Method
pc	1506.98	kPa	Joback Method
rinpol	1872.00		NIST Webbook
tb	622.46	K	Joback Method
tc	797.26	K	Joback Method
tf	301.92	K	Joback Method
vc	0.908	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	604.25	J/mol×K	622.46	Joback Method
cpg	681.97	J/mol×K	768.13	Joback Method
cpg	667.88	J/mol×K	739.00	Joback Method
cpg	653.10	J/mol×K	709.86	Joback Method
cpg	637.60	J/mol×K	680.73	Joback Method
cpg	621.33	J/mol×K	651.59	Joback Method
cpg	695.41	J/mol×K	797.26	Joback Method
dvisc	0.0001266	Pa×s	622.46	Joback Method
dvisc	0.0001702	Pa×s	569.04	Joback Method

dvisc	0.0002433	Pa×s	515.61	Joback Method
dvisc	0.0003778	Pa×s	462.19	Joback Method
dvisc	0.0006579	Pa×s	408.77	Joback Method
dvisc	0.0013539	Pa×s	355.34	Joback Method
dvisc	0.0035968	Pa×s	301.92	Joback Method

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=R506331&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
McGowan Method:	http://link.springer.com/article/10.1007/BF02311772

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