(Z)-6-Pentadecen-2-one

Inchi: InChI=1S/C15H28O/c1-3-4-5-6-7-8-9-10-11-12-13-14-15(2)16/h10-11H,3-9,12-14H2,1-2
InchiKey: BDLYSBLBXFYIRW-KHPPLWFESA-N
Formula: C15H28O
SMILES: CCCCCCCCC=CCCCC(C)=O
Mol. weight [g/mol]: 224.38

Physical Properties

Property code	Value	Unit	Source
gf	26.72	kJ/mol	Joback Method
hf	-348.29	kJ/mol	Joback Method
hfus	36.41	kJ/mol	Joback Method
hvap	55.69	kJ/mol	Joback Method
log10ws	-5.24		Crippen Method
logp	5.053		Crippen Method
mcvol	219.480	ml/mol	McGowan Method
pc	1546.35	kPa	Joback Method
rinpol	1650.00		NIST Webbook
rinpol	1650.00		NIST Webbook
rinpol	1647.00		NIST Webbook
rinpol	1647.00		NIST Webbook
tb	600.63	K	Joback Method
tc	773.80	K	Joback Method
tf	303.66	K	Joback Method
vc	0.862	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	571.12	J/mol×K	600.63	Joback Method
cpg	650.14	J/mol×K	744.94	Joback Method
cpg	635.78	J/mol×K	716.08	Joback Method
cpg	620.73	J/mol×K	687.22	Joback Method
cpg	604.95	J/mol×K	658.35	Joback Method
cpg	588.42	J/mol×K	629.49	Joback Method

cpg	663.84	J/mol×K	773.80	Joback Method
dvisc	0.0001489	Pa×s	600.63	Joback Method
dvisc	0.0001992	Pa×s	551.13	Joback Method
dvisc	0.0002822	Pa×s	501.64	Joback Method
dvisc	0.0004315	Pa×s	452.14	Joback Method
dvisc	0.0007322	Pa×s	402.65	Joback Method
dvisc	0.0014411	Pa×s	353.15	Joback Method
dvisc	0.0035368	Pa×s	303.66	Joback Method

Sources

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
NIST Webbook: http://webbook.nist.gov/cgi/cbook.cgi?ID=R420465&Units=SI

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

Cheméo (https://www.chemeo.com) is the biggest free database of chemical and physical data for the process industry.