1,3(E),5(Z),9-undecatetraene

Other names: 1,(E)3,(Z)5,9-undecatetraene
Inchi: InChI=1S/C11H16/c1-3-5-7-9-11-10-8-6-4-2/h3-7,9,11H,1,8,10H2,2H3/b6-4+,7-5+,11-9-
InchiKey: GDBGMFOLEFOMEA-HZBLWPETSA-N
Formula: C11H16
SMILES: C=CC=CC=CCCC=CC
Mol. weight [g/mol]: 148.24

Physical Properties

Property code	Value	Unit	Source
gf	370.24	kJ/mol	Joback Method
hf	206.72	kJ/mol	Joback Method
hfus	23.57	kJ/mol	Joback Method
hvap	39.28	kJ/mol	Joback Method
log10ws	-3.84		Crippen Method
logp	3.641		Crippen Method
mcvol	148.650	ml/mol	McGowan Method
pc	2320.31	kPa	Joback Method
rinpol	1174.00		NIST Webbook
rinpol	1174.00		NIST Webbook
rinpol	1174.00		NIST Webbook
ripol	1448.00		NIST Webbook
ripol	1448.00		NIST Webbook
tb	460.24	K	Joback Method
tc	649.54	K	Joback Method
tf	196.73	K	Joback Method
vc	0.573	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	295.88	J/mol×K	460.24	Joback Method
cpg	310.73	J/mol×K	491.79	Joback Method
cpg	324.71	J/mol×K	523.34	Joback Method
cpg	337.87	J/mol×K	554.89	Joback Method

cpg	350.26	J/mol×K	586.44	Joback Method
cpg	361.95	J/mol×K	617.99	Joback Method
cpg	372.97	J/mol×K	649.54	Joback Method
dvisc	0.0044996	Pa×s	196.73	Joback Method
dvisc	0.0014648	Pa×s	240.65	Joback Method
dvisc	0.0006743	Pa×s	284.57	Joback Method
dvisc	0.0003819	Pa×s	328.49	Joback Method
dvisc	0.0002474	Pa×s	372.40	Joback Method
dvisc	0.0001756	Pa×s	416.32	Joback Method
dvisc	0.0001331	Pa×s	460.24	Joback Method

Sources

NIST Webbook: http://webbook.nist.gov/cgi/cbook.cgi?ID=R235826&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
ripol: Polar retention indices
tb: Normal Boiling Point Temperature
tc: Critical Temperature
tf: Normal melting (fusion) point
vc: Critical Volume