1,8,11,14-Heptadecatetraene

Other names: heptadeca-1,8,11,14-tetraene
Inchi: InChI=1S/C17H28/c1-3-5-7-9-11-13-15-17-16-14-12-10-8-6-4-2/h3,6,8,12,14-15,17H,1,4-
InchiKey: JXRNMQDTJAQLAQ-LIFWOIOZSA-N
Formula: C17H28
SMILES: C=CCCCCCC=CCC=CCC=CCC
Mol. weight [g/mol]: 232.40
CAS: 71046-96-3

Physical Properties

Property code	Value	Unit	Source
gf	420.76	kJ/mol	Joback Method
hf	82.88	kJ/mol	Joback Method
hfus	39.11	kJ/mol	Joback Method
hvap	52.64	kJ/mol	Joback Method
log10ws	-6.35		Crippen Method
logp	5.982		Crippen Method
mcvol	233.190	ml/mol	McGowan Method
pc	1421.85	kPa	Joback Method
rinpol	1658.00		NIST Webbook
ripol	1863.00		NIST Webbook
tb	597.52	K	Joback Method
tc	775.67	K	Joback Method
tf	264.35	K	Joback Method
vc	0.908	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	588.27	J/mol×K	597.52	Joback Method
cpg	606.51	J/mol×K	627.21	Joback Method
cpg	623.83	J/mol×K	656.90	Joback Method
cpg	640.30	J/mol×K	686.60	Joback Method
cpg	655.97	J/mol×K	716.29	Joback Method
cpg	670.89	J/mol×K	745.98	Joback Method

cpg	685.13	J/mol×K	775.67	Joback Method
dvisc	0.0037576	Pa×s	264.35	Joback Method
dvisc	0.0011716	Pa×s	319.88	Joback Method
dvisc	0.0005157	Pa×s	375.41	Joback Method
dvisc	0.0002804	Pa×s	430.94	Joback Method
dvisc	0.0001753	Pa×s	486.46	Joback Method
dvisc	0.0001206	Pa×s	541.99	Joback Method
dvisc	0.0000890	Pa×s	597.52	Joback Method

Sources

McGowan Method: http://link.springer.com/article/10.1007/BF02311772
NIST Webbook: http://webbook.nist.gov/cgi/cbook.cgi?ID=C71046963&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
ripol: Polar retention indices
tb: Normal Boiling Point Temperature
tc: Critical Temperature
tf: Normal melting (fusion) point
vc: Critical Volume