2,4,6,10-Dodecatetraene

Inchi: InChI=1S/C12H18/c1-3-5-7-9-11-12-10-8-6-4-2/h3-7,9,11-12H,8,10H2,1-2H3/b5-3+,6-4+
InchiKey: FQMSKVLEYYJMON-YXDPKGGVSA-N
Formula: C12H18
SMILES: CC=CC=CC=CCCC=CC
Mol. weight [g/mol]: 162.27

Physical Properties

Property code	Value	Unit	Source
gf	371.04	kJ/mol	Joback Method
hf	177.87	kJ/mol	Joback Method
hfus	27.64	kJ/mol	Joback Method
hvap	42.14	kJ/mol	Joback Method
log10ws	-4.26		Crippen Method
logp	4.031		Crippen Method
mcvol	162.740	ml/mol	McGowan Method
pc	2139.38	kPa	Joback Method
rinpol	1321.00		NIST Webbook
rinpol	1324.00		NIST Webbook
tb	490.60	K	Joback Method
tc	682.67	K	Joback Method
tf	204.68	K	Joback Method
vc	0.627	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	341.52	J/mol×K	490.60	Joback Method
cpg	357.35	J/mol×K	522.61	Joback Method
cpg	372.23	J/mol×K	554.62	Joback Method
cpg	386.22	J/mol×K	586.63	Joback Method
cpg	399.40	J/mol×K	618.65	Joback Method
cpg	411.83	J/mol×K	650.66	Joback Method
cpg	423.57	J/mol×K	682.67	Joback Method
dvisc	0.0049325	Pa×s	204.68	Joback Method

dvisc	0.0014256	Pa×s	252.33	Joback Method
dvisc	0.0006112	Pa×s	299.99	Joback Method
dvisc	0.0003305	Pa×s	347.64	Joback Method
dvisc	0.0002073	Pa×s	395.29	Joback Method
dvisc	0.0001437	Pa×s	442.95	Joback Method
dvisc	0.0001070	Pa×s	490.60	Joback Method

Sources

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=R61013&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l
Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws

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