Tetraline, 2-propyl

Inchi: InChI=1S/C13H18/c1-2-5-11-8-9-12-6-3-4-7-13(12)10-11/h3-4,6-7,11H,2,5,8-10H2,1H3
InchiKey: WCPBRIKLXLQGRY-UHFFFAOYSA-N
Formula: C13H18
SMILES: CCCC1CCc2ccccc2C1
Mol. weight [g/mol]: 174.28

Physical Properties

Property code	Value	Unit	Source
gf	210.01	kJ/mol	Joback Method
hf	-19.95	kJ/mol	Joback Method
hfus	19.11	kJ/mol	Joback Method
hvap	47.56	kJ/mol	Joback Method
log10ws	-3.99		Crippen Method
logp	3.592		Crippen Method
mcvol	159.410	ml/mol	McGowan Method
pc	2512.55	kPa	Joback Method
rinpol	1410.00		NIST Webbook
tb	539.51	K	Joback Method
tc	760.00	K	Joback Method
tf	289.63	K	Joback Method
vc	0.605	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	380.48	J/mol×K	539.51	Joback Method
cpg	465.30	J/mol×K	723.26	Joback Method
cpg	450.53	J/mol×K	686.51	Joback Method
cpg	434.72	J/mol×K	649.76	Joback Method
cpg	417.82	J/mol×K	613.01	Joback Method
cpg	399.76	J/mol×K	576.26	Joback Method
cpg	479.11	J/mol×K	760.00	Joback Method
dvisc	0.0003240	Pa×s	539.51	Joback Method
dvisc	0.0003911	Pa×s	497.86	Joback Method

dvisc	0.0004887	Pa×s	456.22	Joback Method
dvisc	0.0006385	Pa×s	414.57	Joback Method
dvisc	0.0008855	Pa×s	372.92	Joback Method
dvisc	0.0013334	Pa×s	331.28	Joback Method
dvisc	0.0022586	Pa×s	289.63	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=R578415&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