

Tetraline, 5-propyl

Inchi:	InChI=1S/C13H18/c1-2-6-11-8-5-9-12-7-3-4-10-13(11)12/h5,8-9H,2-4,6-7,10H2,1H3
InchiKey:	JYPMNМУJDLKKJO-UHFFFAOYSA-N
Formula:	C13H18
SMILES:	CCCc1cccc2c1CCCC2
Mol. weight [g/mol]:	174.28

Physical Properties

Property code	Value	Unit	Source
gf	208.09	kJ/mol	Joback Method
hf	-11.08	kJ/mol	Joback Method
hfus	17.65	kJ/mol	Joback Method
hvap	48.53	kJ/mol	Joback Method
log10ws	-4.19		Crippen Method
logp	3.518		Crippen Method
mcvol	159.410	ml/mol	McGowan Method
pc	2558.51	kPa	Joback Method
rinqol	1442.00		NIST Webbook
tb	549.16	K	Joback Method
tc	770.85	K	Joback Method
tf	306.39	K	Joback Method
vc	0.606	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	379.96	J/molxK	549.16	Joback Method
cpg	398.40	J/molxK	586.11	Joback Method
cpg	415.67	J/molxK	623.06	Joback Method
cpg	431.83	J/molxK	660.00	Joback Method
cpg	446.96	J/molxK	696.95	Joback Method
cpg	461.12	J/molxK	733.90	Joback Method
cpg	474.36	J/molxK	770.85	Joback Method
dvisc	0.0022068	Paxs	306.39	Joback Method
dvisc	0.0012897	Paxs	346.85	Joback Method

dvisc	0.0008433	Paxs	387.31	Joback Method
dvisc	0.0005975	Paxs	427.77	Joback Method
dvisc	0.0004494	Paxs	468.24	Joback Method
dvisc	0.0003536	Paxs	508.70	Joback Method
dvisc	0.0002883	Paxs	549.16	Joback Method

Sources

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=R578455&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l

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

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