Naphthalene, 1,2,3,4-tetrahydro-6-propyl-

Other names:	6-n-Propyltetralin
	6-Propyltetraline
	Tetraline, 6-propyl
Inchi:	InChI=1S/C13H18/c1-2-5-11-8-9-12-6-3-4-7-13(12)10-11/h8-10H,2-7H2,1H3
InchiKey:	DSPJLZIUEXVMGA-UHFFFAOYSA-N
Formula:	C13H18
SMILES:	CCCc1ccc2c(c1)CCCC2
Mol. weight [g/mol]:	174.28
CAS:	42775-77-9

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
rinpol	1340.00		NIST Webbook
rinpol	1340.00		NIST Webbook
tb	549.16	K	Joback Method
tc	770.85	K	Joback Method
tf	306.39	K	Joback Method
vc	0.606	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	379.96	J/mol×K	549.16	Joback Method
cpg	398.40	J/mol×K	586.11	Joback Method
cpg	415.67	J/mol×K	623.06	Joback Method
cpg	431.83	J/mol×K	660.00	Joback Method

cpg	446.96	J/mol×K	696.95	Joback Method
cpg	461.12	J/mol×K	733.90	Joback Method
cpg	474.36	J/mol×K	770.85	Joback Method
dvisc	0.0022068	Pa×s	306.39	Joback Method
dvisc	0.0012897	Pa×s	346.85	Joback Method
dvisc	0.0008433	Pa×s	387.31	Joback Method
dvisc	0.0005975	Pa×s	427.77	Joback Method
dvisc	0.0004494	Pa×s	468.24	Joback Method
dvisc	0.0003536	Pa×s	508.70	Joback Method
dvisc	0.0002883	Pa×s	549.16	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=C42775779&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