1-Tetralol

Inchi: InChI=1S/C10H12O/c11-10-7-3-5-8-4-1-2-6-9(8)10/h1-2,4,6,10-11H,3,5,7H2
InchiKey: JAAJQSRLGAYGKZ-UHFFFAOYSA-N
Formula: C10H12O
SMILES: OC1CCCc2ccccc21
Mol. weight [g/mol]: 148.20
CAS: 5929-35-1

Physical Properties

Property code	Value	Unit	Source
chs	-5364.70	kJ/mol	NIST Webbook
gf	47.93	kJ/mol	Joback Method
hf	-110.26	kJ/mol	Joback Method
hfs	-285.30 ± 5.40	kJ/mol	NIST Webbook
hfus	15.43	kJ/mol	Joback Method
hvap	57.56	kJ/mol	Joback Method
log10ws	-2.69		Crippen Method
logp	2.056		Crippen Method
mcvol	123.010	ml/mol	McGowan Method
pc	3834.03	kPa	Joback Method
tb	563.05	K	Joback Method
tc	777.80	K	Joback Method
tf	316.64	K	Joback Method
vc	0.456	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	297.13	J/mol×K	563.05	Joback Method
cpg	310.75	J/mol×K	598.84	Joback Method
cpg	323.48	J/mol×K	634.63	Joback Method
cpg	335.35	J/mol×K	670.42	Joback Method
cpg	346.43	J/mol×K	706.21	Joback Method
cpg	356.76	J/mol×K	742.01	Joback Method
cpg	366.40	J/mol×K	777.80	Joback Method

dvisc	0.0066435	Pa×s	316.64	Joback Method
dvisc	0.0025404	Pa×s	357.71	Joback Method
dvisc	0.0011841	Pa×s	398.78	Joback Method
dvisc	0.0006365	Pa×s	439.84	Joback Method
dvisc	0.0003804	Pa×s	480.91	Joback Method
dvisc	0.0002465	Pa×s	521.98	Joback Method
dvisc	0.0001702	Pa×s	563.05	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=C5929351&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l
Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws

Legend

chs:	Standard solid enthalpy of combustion
cpg:	Ideal gas heat capacity
dvisc:	Dynamic viscosity
gf:	Standard Gibbs free energy of formation
hf:	Enthalpy of formation at standard conditions
hfs:	Solid phase 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
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume

Cheméo (https://www.chemeo.com) is the biggest free database of chemical and physical data for the process industry.