[1,1':3',1''-Terphenyl]-2'-ol

Other names: [m-Terphenyl]-2'-ol
2,6-Diphenylphenol
Inchi: InChI=1S/C18H14O/c19-18-16(14-8-3-1-4-9-14)12-7-13-17(18)15-10-5-2-6-11-15/h1-13,
InchiKey: ATGFTMUSEPZNJD-UHFFFAOYSA-N
Formula: C18H14O
SMILES: Oc1c(-c2ccccc2)cccc1-c1ccccc1
Mol. weight [g/mol]: 246.30
CAS: 2432-11-3

Physical Properties

Property code	Value	Unit	Source
gf	273.66	kJ/mol	Joback Method
hf	105.96	kJ/mol	Joback Method
hfus	29.89	kJ/mol	Joback Method
hsub	119.10 ± 1.10	kJ/mol	NIST Webbook
hvap	76.17	kJ/mol	Joback Method
log10ws	-6.23		Crippen Method
logp	4.726		Crippen Method
mcvol	199.070	ml/mol	McGowan Method
pc	3022.28	kPa	Joback Method
tb	776.88	K	Joback Method
tc	1052.42	K	Joback Method
tf	496.12	K	Joback Method
vc	0.685	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	546.01	J/mol×K	776.88	Joback Method
cpg	561.42	J/mol×K	822.80	Joback Method
cpg	575.64	J/mol×K	868.73	Joback Method
cpg	588.90	J/mol×K	914.65	Joback Method
cpg	601.43	J/mol×K	960.58	Joback Method
cpg	613.45	J/mol×K	1006.50	Joback Method

cpg	625.18	J/mol×K	1052.42	Joback Method
dvisc	0.0002318	Pa×s	496.12	Joback Method
dvisc	0.0001048	Pa×s	542.91	Joback Method
dvisc	0.0000538	Pa×s	589.71	Joback Method
dvisc	0.0000304	Pa×s	636.50	Joback Method
dvisc	0.0000186	Pa×s	683.29	Joback Method
dvisc	0.0000121	Pa×s	730.09	Joback Method
dvisc	0.0000083	Pa×s	776.88	Joback Method
hsubt	116.10 ± 1.10	kJ/mol	348.50	NIST Webbook

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=C2432113&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
hsub: Enthalpy of sublimation at standard conditions
hsubt: Enthalpy of sublimation at a given temperature
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

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