Phenol, 4,4',4''-ethylidynetris-

Other names: 1,1,1-Tris(4-hydroxyphenyl)ethane
Inchi: InChI=1S/C20H18O3/c1-20(14-2-8-17(21)9-3-14,15-4-10-18(22)11-5-15)16-6-12-19(23)1
InchiKey: BRPSWMCDEYMRPE-UHFFFAOYSA-N
Formula: C20H18O3
SMILES: CC(c1ccc(O)cc1)(c1ccc(O)cc1)c1ccc(O)cc1
Mol. weight [g/mol]: 306.36
CAS: 27955-94-8

Physical Properties

Property code	Value	Unit	Source
gf	-6.27	kJ/mol	Joback Method
hf	-287.22	kJ/mol	Joback Method
hfus	39.61	kJ/mol	Joback Method
hvap	104.69	kJ/mol	Joback Method
log10ws	-4.03		Crippen Method
logp	4.158		Crippen Method
mcvol	238.990	ml/mol	McGowan Method
pc	3547.31	kPa	Joback Method
tb	975.67	K	Joback Method
tc	1259.62	K	Joback Method
tf	732.00	K	Joback Method
vc	0.719	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	755.11	J/mol×K	975.67	Joback Method
cpg	863.12	J/mol×K	1212.29	Joback Method
cpg	837.06	J/mol×K	1164.97	Joback Method
cpg	813.71	J/mol×K	1117.64	Joback Method
cpg	792.60	J/mol×K	1070.32	Joback Method
cpg	773.23	J/mol×K	1022.99	Joback Method
cpg	892.40	J/mol×K	1259.62	Joback Method
dvisc	3.5395230e-09	Pa×s	975.67	Joback Method

dvisc	5.5421618e-09	Pa×s	935.06	Joback Method
dvisc	9.0385175e-09	Pa×s	894.45	Joback Method
dvisc	1.5442657e-08	Pa×s	853.84	Joback Method
dvisc	2.7834347e-08	Pa×s	813.22	Joback Method
dvisc	5.3375019e-08	Pa×s	772.61	Joback Method
dvisc	0.0000001	Pa×s	732.00	Joback Method

Sources

Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l
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=C27955948&Units=SI

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
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume