Toluene, 3,4-bis(benzyloxy)-

Inchi: InChI=1S/C21H20O2/c1-17-12-13-20(22-15-18-8-4-2-5-9-18)21(14-17)23-16-19-10-6-3-7
InchiKey: JQAYGWDEFAVMCJ-UHFFFAOYSA-N
Formula: C21H20O2
SMILES: Cc1ccc(OCc2ccccc2)c(OCc2ccccc2)c1
Mol. weight [g/mol]: 304.38
CAS: 4790-00-5

Physical Properties

Property code	Value	Unit	Source
gf	233.91	kJ/mol	Joback Method
hf	-54.56	kJ/mol	Joback Method
hfus	33.87	kJ/mol	Joback Method
hvap	75.31	kJ/mol	Joback Method
log10ws	-6.41		Crippen Method
logp	5.153		Crippen Method
mcvol	247.210	ml/mol	McGowan Method
pc	1882.17	kPa	Joback Method
tb	814.72	K	Joback Method
tc	1059.61	K	Joback Method
tf	475.19	K	Joback Method
vc	0.923	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	713.37	J/mol×K	814.72	Joback Method
cpg	730.22	J/mol×K	855.53	Joback Method
cpg	745.55	J/mol×K	896.35	Joback Method
cpg	759.42	J/mol×K	937.16	Joback Method
cpg	771.90	J/mol×K	977.98	Joback Method
cpg	783.06	J/mol×K	1018.79	Joback Method
cpg	792.94	J/mol×K	1059.61	Joback Method
dvisc	0.0004930	Pa×s	475.19	Joback Method
dvisc	0.0002798	Pa×s	531.78	Joback Method

dvisc	0.0001770	Pa×s	588.37	Joback Method
dvisc	0.0001214	Pa×s	644.96	Joback Method
dvisc	0.0000885	Pa×s	701.54	Joback Method
dvisc	0.0000676	Pa×s	758.13	Joback Method
dvisc	0.0000536	Pa×s	814.72	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=C4790005&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