4-(4,5-Dimethyl-1,3-dioxolan-2-yl)-2-methoxyphen

Inchi: InChI=1S/C12H16O4/c1-7-8(2)16-12(15-7)9-4-5-10(13)11(6-9)14-3/h4-8,12-13H,1-3H3
InchiKey: JZJHVHUFPUYAJF-UHFFFAOYSA-N
Formula: C12H16O4
SMILES: COc1cc(C2OC(C)C(C)O2)ccc1O
Mol. weight [g/mol]: 224.25
CAS: 63253-24-7

Physical Properties

Property code	Value	Unit	Source
gf	-257.79	kJ/mol	Joback Method
hf	-619.68	kJ/mol	Joback Method
hfus	39.49	kJ/mol	Joback Method
hvap	69.33	kJ/mol	Joback Method
log10ws	-2.44		Crippen Method
logp	2.223		Crippen Method
mcvol	168.800	ml/mol	McGowan Method
pc	2999.15	kPa	Joback Method
rinpol	1750.90		NIST Webbook
rinpol	1750.90		NIST Webbook
tb	668.50	K	Joback Method
tc	902.41	K	Joback Method
tf	453.45	K	Joback Method
vc	0.565	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	484.45	J/mol×K	668.50	Joback Method
cpg	556.02	J/mol×K	863.42	Joback Method
cpg	543.60	J/mol×K	824.44	Joback Method
cpg	530.30	J/mol×K	785.45	Joback Method
cpg	516.05	J/mol×K	746.47	Joback Method
cpg	500.78	J/mol×K	707.48	Joback Method
cpg	567.61	J/mol×K	902.41	Joback Method

dvisc	0.0000338	Pa×s	668.50	Joback Method
dvisc	0.0000471	Pa×s	632.66	Joback Method
dvisc	0.0000684	Pa×s	596.82	Joback Method
dvisc	0.0001042	Pa×s	560.98	Joback Method
dvisc	0.0001680	Pa×s	525.13	Joback Method
dvisc	0.0002905	Pa×s	489.29	Joback Method
dvisc	0.0005477	Pa×s	453.45	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C63253247&Units=SI
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

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