1,3-Dioxolane, 2-ethyl-4-phenyl, # 2

Inchi: InChI=1S/C11H14O2/c1-2-11-12-8-10(13-11)9-6-4-3-5-7-9/h3-7,10-11H,2,8H2,1H3
InchiKey: YKGKRDIKDNYZNF-UHFFFAOYSA-N
Formula: C11H14O2
SMILES: CCC1OCC(c2ccccc2)O1
Mol. weight [g/mol]: 178.23

Physical Properties

Property code	Value	Unit	Source
gf	10.75	kJ/mol	Joback Method
hf	-257.70	kJ/mol	Joback Method
hfus	29.25	kJ/mol	Joback Method
hvap	51.32	kJ/mol	Joback Method
log10ws	-2.67		Crippen Method
logp	2.511		Crippen Method
mcvol	142.970	ml/mol	McGowan Method
pc	3038.96	kPa	Joback Method
rinpol	1333.00		NIST Webbook
rinpol	1333.00		NIST Webbook
ripol	1880.00		NIST Webbook
ripol	1880.00		NIST Webbook
tb	542.27	K	Joback Method
tc	773.49	K	Joback Method
tf	299.95	K	Joback Method
vc	0.525	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	349.88	J/mol×K	542.27	Joback Method
cpg	368.02	J/mol×K	580.81	Joback Method
cpg	384.95	J/mol×K	619.34	Joback Method
cpg	400.72	J/mol×K	657.88	Joback Method
cpg	415.37	J/mol×K	696.42	Joback Method
cpg	428.95	J/mol×K	734.95	Joback Method

cpg	441.52	J/mol×K	773.49	Joback Method
dvisc	0.0031907	Pa×s	299.95	Joback Method
dvisc	0.0017650	Pa×s	340.34	Joback Method
dvisc	0.0011070	Pa×s	380.72	Joback Method
dvisc	0.0007593	Pa×s	421.11	Joback Method
dvisc	0.0005564	Pa×s	461.50	Joback Method
dvisc	0.0004286	Pa×s	501.88	Joback Method
dvisc	0.0003432	Pa×s	542.27	Joback Method

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=R409200&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
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
ripol: Polar retention indices
tb: Normal Boiling Point Temperature
tc: Critical Temperature
tf: Normal melting (fusion) point
vc: Critical Volume