4-Ethylphenylacetic acid

Inchi: InChI=1S/C10H12O2/c1-2-8-3-5-9(6-4-8)7-10(11)12/h3-6H,2,7H2,1H3,(H,11,12)
InchiKey: QMBLXRHXCGJOGU-UHFFFAOYSA-N
Formula: C10H12O2
SMILES: CCc1ccc(CC(=O)O)cc1
Mol. weight [g/mol]: 164.20

Physical Properties

Property code	Value	Unit	Source
gf	-129.64	kJ/mol	Joback Method
hf	-289.48	kJ/mol	Joback Method
hfus	21.00	kJ/mol	Joback Method
hvap	64.22	kJ/mol	Joback Method
log10ws	-2.18		Crippen Method
logp	1.876		Crippen Method
mcvol	135.440	ml/mol	McGowan Method
pc	3431.89	kPa	Joback Method
rinpol	1452.00		NIST Webbook
tb	605.91	K	Joback Method
tc	807.12	K	Joback Method
tf	352.15	K	Joback Method
vc	0.512	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	326.71	J/mol×K	605.91	Joback Method
cpg	375.96	J/mol×K	773.59	Joback Method
cpg	367.30	J/mol×K	740.05	Joback Method
cpg	358.07	J/mol×K	706.52	Joback Method
cpg	348.25	J/mol×K	672.98	Joback Method
cpg	337.80	J/mol×K	639.45	Joback Method
cpg	384.07	J/mol×K	807.12	Joback Method
dvisc	0.0000889	Pa×s	605.91	Joback Method
dvisc	0.0001322	Pa×s	563.62	Joback Method

dvisc	0.0002095	Pa×s	521.32	Joback Method
dvisc	0.0003602	Pa×s	479.03	Joback Method
dvisc	0.0006879	Pa×s	436.74	Joback Method
dvisc	0.0015091	Pa×s	394.44	Joback Method
dvisc	0.0039982	Pa×s	352.15	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=R31711&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
rinpol: Non-polar retention indices
tb: Normal Boiling Point Temperature
tc: Critical Temperature
tf: Normal melting (fusion) point
vc: Critical Volume