

Methacrylic acid, 3-ethylphenyl ester

Inchi:	InChI=1S/C12H14O2/c1-4-10-6-5-7-11(8-10)14-12(13)9(2)3/h5-8H,2,4H2,1,3H3
InchiKey:	JYBRWFGZBXMHSO-UHFFFAOYSA-N
Formula:	C12H14O2
SMILES:	<chem>C=C(C)C(=O)Oc1cccc(CC)c1</chem>
Mol. weight [g/mol]:	190.24

Physical Properties

Property code	Value	Unit	Source
gf	-1.69	kJ/mol	Joback Method
hf	-195.11	kJ/mol	Joback Method
hfus	20.69	kJ/mol	Joback Method
hvap	53.81	kJ/mol	Joback Method
log10ws	-3.28		Crippen Method
logp	2.730		Crippen Method
mcvol	159.320	ml/mol	McGowan Method
pc	2600.43	kPa	Joback Method
rinpola	1436.00		NIST Webbook
tb	578.47	K	Joback Method
tc	793.43	K	Joback Method
tf	320.38	K	Joback Method
vc	0.606	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	373.21	J/mol×K	578.47	Joback Method
cpg	387.71	J/mol×K	614.30	Joback Method
cpg	401.38	J/mol×K	650.12	Joback Method
cpg	414.22	J/mol×K	685.95	Joback Method
cpg	426.27	J/mol×K	721.78	Joback Method
cpg	437.56	J/mol×K	757.61	Joback Method
cpg	448.10	J/mol×K	793.43	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=U360691&Units=SI

Legend

cpg:	Ideal gas heat capacity
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
mccvol:	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

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