Mecoprop

Other names:

Propanoic acid, 2-(4-chloro-2-methylphenoxy)-
Propionic acid, 2-[(4-chloro-o-tolyl)oxy]-
«alpha»-(2-Methyl-4-chlorophenoxy)propionic acid
Anicon B
2-(p-Chloro-o-tolyloxy)propionic acid
2-(2-Methyl-4-chlorophenoxy)propanoic acid
2-(2-Methyl-4-chlorophenoxy)propionic acid
2-(2'-Methyl-4'-chlorophenoxy)propionic acid
2-(4-Chloro-2-methylphenoxy)propionic acid
2M4KhP
2-(4-Chloro-o-tolyloxy)propionic acid
Acide 2-(4-chloro-2-methyl-phenoxy)propionique
Acido 2-(4-cloro-2-metil-fenossi)-propionico
Chipco turf herbicide mcpp
Compitox
CMPP
iso-Cornox
Kilprop
Liranox
Mecopar
Mecopeop
Mecoper
Mecopex
Mecoturf
Mecprop
Mepro
Methoxone
MCPP
N.B. Mecoprop
Propionic acid, 2-(2-methyl-4-chlorophenoxy)-
Propionic acid, 2-(4-chloro-2-methylphenoxy)
Rankotex
Runcatex
RD 4593
Vi-Par
Vi-Pex
2-(4-Chloor-2-methyl-fenoxy)-propionzuur
2-(4-Chlor-2-methyl-phenoxy)-propionsaeure
2-(4-Chlorophenoxy-2-methyl)propionic acid
2-MCPP

2M-4CP
2-(4-Chloro-2-methylphenoxy)propanoic acid
«alpha»-(4-Chloro-2-methylphenoxy)propionic acid
FBC CMPP
Kwas 4-chloro-2-metylofenoksypropionowy
Kyselina 2-(4-chlor-2-methylfenoxy)propionova
Mecomec
2-(2-Methyl-4-chlorphenoxy)-propionsaeure
Proponex-plus
U 46
U 46 KV-fluid
Duplosan CMPP
Duplosan new system CMPP
Okultin MP
(+/-)-2-(4-Chloro-2-methylphenoxy)propanoic acid
(+/-)-2-(4-Chloro-2-methylphenoxy)propionic acid
Isocarnox
Mechlorprop
Morogal

Inchi: InChI=1S/C10H11ClO3/c1-6-5-8(11)3-4-9(6)14-7(2)10(12)13/h3-5,7H,1-2H3,(H,12,13)
InchiKey: WNTGYJSOUMFZEP-UHFFFAOYSA-N
Formula: C9H11ClO3
SMILES: Cc1cc(Cl)ccc1OC(C)C(=O)O
Mol. weight [g/mol]: 202.63
CAS: 93-65-2

Physical Properties

Property code	Value	Unit	Source
gf	-258.64	kJ/mol	Joback Method
hf	-454.19	kJ/mol	Joback Method
hfus	22.47	kJ/mol	Joback Method
hvap	71.29	kJ/mol	Joback Method
log10ws	-2.80		Crippen Method
logp	2.500		Crippen Method
mcvol	153.550	ml/mol	McGowan Method
pc	3199.16	kPa	Joback Method
rinpol	1740.00		NIST Webbook
rinpol	1740.00		NIST Webbook
tb	670.30	K	Joback Method
tc	877.99	K	Joback Method

tf	367.30 ± 0.20	K	NIST Webbook
tf	367.00 ± 0.20	K	NIST Webbook
vc	0.574	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	424.84	J/mol×K	877.99	Joback Method
cpg	417.64	J/mol×K	843.38	Joback Method
cpg	409.86	J/mol×K	808.76	Joback Method
cpg	401.49	J/mol×K	774.15	Joback Method
cpg	392.50	J/mol×K	739.53	Joback Method
cpg	382.90	J/mol×K	704.92	Joback Method
cpg	372.67	J/mol×K	670.30	Joback Method
dvisc	0.0016607	Pa×s	401.82	Joback Method
dvisc	0.0000517	Pa×s	670.30	Joback Method
dvisc	0.0000750	Pa×s	625.55	Joback Method
dvisc	0.0001151	Pa×s	580.81	Joback Method
dvisc	0.0001898	Pa×s	536.06	Joback Method
dvisc	0.0003429	Pa×s	491.31	Joback Method
dvisc	0.0006973	Pa×s	446.57	Joback Method
hfust	26.43	kJ/mol	366.20	NIST Webbook

Sources

NIST Webbook: http://webbook.nist.gov/cgi/cbook.cgi?ID=C93652&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
McGowan Method: http://link.springer.com/article/10.1007/BF02311772

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
hfust:	Enthalpy of fusion at a given temperature
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