

Formic acid, azodi-, dimethyl ester

Other names:	Azo, diformic acid, dimethyl ester Azodicarboxylic acid, dimethyl ester
Inchi:	InChI=1S/C4H6N2O4/c1-9-3(7)5-6-4(8)10-2/h1-2H3/b6-5+
InchiKey:	NCBFTYFOPLPRBX-AATRIKPKSA-N
Formula:	C4H6N2O4
SMILES:	COC(=O)N=NC(=O)OC
Mol. weight [g/mol]:	146.10
CAS:	2446-84-6

Physical Properties

Property code	Value	Unit	Source
hf	-568.27	kJ/mol	Joback Method
hvap	49.48	kJ/mol	Joback Method
log10ws	-0.44		Crippen Method
logp	0.971		Crippen Method
mcvol	97.760	ml/mol	McGowan Method
pc	3184.73	kPa	Joback Method
tb	592.70	K	Joback Method
tc	811.31	K	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C2446846&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307I
Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws
Joback Method:	https://en.wikipedia.org/wiki/Joback_method

Legend

hf: Enthalpy of formation at standard conditions

h_{vap}:	Enthalpy of vaporization at standard conditions
log₁₀w_s:	Log10 of Water solubility in mol/l
log_p:	Octanol/Water partition coefficient
mc_{vol}:	McGowan's characteristic volume
p_c:	Critical Pressure
t_b:	Normal Boiling Point Temperature
t_c:	Critical Temperature

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