Dixanthogen

Other names:

Formic acid, dithiobis[thio-, O,O-diethyl ester
Thioperoxydicarbonic acid ([(HO)C(S)]2S2), diethyl ester
Antigal
Auligen
Aulin
Aulinogen
Bexide
Bis[ethylxanthogen]
Diethyl Dixanthogenate
Diethyl xanthogenate
Diethylxanthogen disulfide
Dithiobis(thioformic acid) O,O-diethyl ester
Dixan
EXD
Galasan
Herbisan
Herbisan 5
K Preparation
Lenisarin
O,O-Diethyl Dithiobis[thioformate]
Scabicidol
Thioperoxydicarbonic acid, diethyl ester
Xantoscabin
Diethyl dithiobis(thiono formate)
Bis(ethylxanthic)disulfide
Diethylxanthic disulfide
DEX
Ethyl xanthogen disulfide
O,O-Diethyl ester of dithiobis(thioformic acid)
Preparation K
Silfasan
Sulfasan
Xanthogen, bis(ethyl-
Bisethylxanthogen disulfide
Di-ethoxythiokarbonyl-disulfid
Diethyl dixanthogen
Ethylxanthic disulfide
Skabilan
Thioperoxydicarbonic acid (((HO)C(S))2S2), OC,OC'-diethyl ester
NSC 402561

Inchi: InChI=1S/C6H10O2S4/c1-3-7-5(9)11-12-6(10)8-4-2/h3-4H2,1-2H3
InchiKey: FVIGODVHAVLZOO-UHFFFAOYSA-N
Formula: C6H10O2S4
SMILES: CCOC(=S)SSC(=S)OCC
Mol. weight [g/mol]: 242.40
CAS: 502-55-6

Physical Properties

Property code	Value	Unit	Source
gf	90.00	kJ/mol	Joback Method
hf	-54.87	kJ/mol	Joback Method
hfus	31.14	kJ/mol	Joback Method
hvap	60.86	kJ/mol	Joback Method
log10ws	-3.96		Crippen Method
logp	3.011		Crippen Method
mcvol	163.940	ml/mol	McGowan Method
pc	3857.88	kPa	Joback Method
tb	659.16	K	Joback Method
tc	916.10	K	Joback Method
tf	339.18	K	Joback Method
vc	0.588	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	348.82	J/mol×K	659.16	Joback Method
cpg	358.50	J/mol×K	701.98	Joback Method
cpg	367.46	J/mol×K	744.81	Joback Method
cpg	375.75	J/mol×K	787.63	Joback Method
cpg	383.44	J/mol×K	830.46	Joback Method
cpg	390.56	J/mol×K	873.28	Joback Method
cpg	397.18	J/mol×K	916.10	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=C502556&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l

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
mcvol:	McGowan's characteristic volume
pc:	Critical Pressure
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume