Bis(dimethylthiocarbamyl) sulfide

Other names:
Tetramethylthiuram monosulfide
Thiodicarbonic diamide ([(H2-N)C(S)]2-S), tetramethyl-
Aceto TMTM
Bis(dimethylthiocarbamoyl) sulfide
Bis(dimethylthiocarbamyl) monosulfide
Carbamic acid, dimethyldithio-, anhydrosulfide
Carbamic anhydride, tetramethyltrithio-
Carbamodithioic acid, dimethyl-, anhydrosulfide
Cyuram MS
Ekagom TM
Formamide, 1,1'-thiobis(N,N-dimethylthio-
Monex
Mono-Thiurad
Monothiuram
N,N,N',N'-Tetramethylthiuram monosulfide
Sulfide, bis(dimethylthiocarbamoyl)
Sulfide, bis((dimethylamino)thioxomethyl)
Tetramethyldithiocarbamic acid anhydrosulfide
Tetramethylthiuram sulfide
Tetramethylthiuramide sulfide
Thiuram monosulfide, tetramethyl-
Thiuram MM
TMTM
TMTMS
Unads
USAF EK-P-6255
USAF B-32
Vulkacit Thiuram MS
Monosulfure de tetramethylthiurame
Pennac MS
Tetramethylthiuramonosulfide
Vulkacit MS
Vulkacit thiuram ms/C
Perkacit TMTM
Thiodicarbonic diamide, tetramethyl-
NSC 3400
Tetramethylthiurammonium sulfide
NSC 4767
tetramethylthiuram monosulphide

Inchi: InChI=1S/C6H12N2S3/c1-7(2)5(9)11-6(10)8(3)4/h1-4H3

InchiKey: REQPQFUJGGOFQL-UHFFFAOYSA-N
Formula: C6H12N2S3
SMILES: CN(C)C(=S)SC(=S)N(C)C
Mol. weight [g/mol]: 208.37
CAS: 97-74-5

Physical Properties

Property code	Value	Unit	Source
chs	-5930.50 ± 1.00	kJ/mol	NIST Webbook
gf	488.44	kJ/mol	Joback Method
hf	302.76	kJ/mol	Joback Method
hfs	47.50 ± 1.30	kJ/mol	NIST Webbook
hfus	30.67	kJ/mol	Joback Method
hvap	53.31	kJ/mol	Joback Method
log10ws	-2.05		Crippen Method
logp	1.413		Crippen Method
mcvol	155.810	ml/mol	McGowan Method
pc	3920.94	kPa	Joback Method
tb	570.42	K	Joback Method
tc	808.21	K	Joback Method
tf	325.26	K	Joback Method
vc	0.533	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	331.73	J/mol×K	570.42	Joback Method
cpg	343.27	J/mol×K	610.05	Joback Method
cpg	353.79	J/mol×K	649.68	Joback Method
cpg	363.41	J/mol×K	689.31	Joback Method
cpg	372.25	J/mol×K	728.95	Joback Method
cpg	380.44	J/mol×K	768.58	Joback Method
cpg	388.08	J/mol×K	808.21	Joback Method
cps	261.50	J/mol×K	298.15	NIST Webbook

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=C97745&Units=SI

Legend

chs:	Standard solid enthalpy of combustion
cpg:	Ideal gas heat capacity
cps:	Solid phase heat capacity
gf:	Standard Gibbs free energy of formation
hf:	Enthalpy of formation at standard conditions
hfs:	Solid phase 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