

VX

Other names:	A 4 MPT Methyl-phosphonothioic acid S-(2-diisopropylamino-ethyl) ester O-ethyl ester Methylthiophosphonic acid, O-ethyl-S-[2-(N,N-diisopropylamino)ethyl] ester O-Ethyl S-2-diisopropylaminoethyl methylphosphonothiolate O-ethyl S-(2-diisopropylaminoethyl) methylphosphonothioate O-ethyl S-(2-diisopropylaminoethyl) methylthiophosphonate O-ethyl S-diisopropylaminoethyl methylphosphonothioate O-ethyl-S-[2-(N,N-diisopropylamino)ethyl] methylthiophosphon Phosphonohioic acid, methyl, O-ethyl-S-(2-diisopropylaminoethyl) ester Phosphonothioic acid, P-methyl-, S-(2-(bis(1-methylethyl)amino)ethyl) O-ethyl ester S-2-diisopropylaminoethyl O-ethyl methylphosphonothioate S-[2-(Diisopropylamino)ethyl] o-ethyl methylphosphonothioate S-[2-(diisopropylamino)ethyl] O-ethyl methylphosphonothiolate VX agent VX vapor phosphonothioic acid, methyl-, S-[2-[bis(1-methylethyl)amino]ethyl] O-ethyl ester tx 60
Inchi:	InChI=1S/C11H26NO2PS/c1-7-14-15(6,13)16-9-8-12(10(2)3)11(4)5/h10-11H,7-9H2,1-6H
InchiKey:	JJIUCEJQJXNMHV-UHFFFAOYSA-N
Formula:	C11H26NO2PS
SMILES:	CCOP(C)(=O)SCCN(C(C)C)C(C)C
Mol. weight [g/mol]:	267.37
CAS:	50782-69-9

Physical Properties

Property code	Value	Unit	Source
log10ws	-4.47		Crippen Method
logp	3.698		Crippen Method
mcpvol	224.380	ml/mol	McGowan Method
rinpol	1664.00		NIST Webbook
rinpol	1667.00		NIST Webbook
rinpol	1705.00		NIST Webbook
rinpol	1664.10		NIST Webbook
rinpol	1710.10		NIST Webbook
rinpol	1667.00		NIST Webbook
rinpol	1713.00		NIST Webbook

rinpol	1708.00	NIST Webbook
rinpol	1704.00	NIST Webbook
rinpol	1713.00	NIST Webbook
rinpol	1708.00	NIST Webbook
rinpol	1667.00	NIST Webbook
rinpol	1713.00	NIST Webbook
ripol	2275.30	NIST Webbook
ripol	2275.30	NIST Webbook

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
hvapt	101.00	kJ/mol	297.50	NIST Webbook
hvapt	77.90	kJ/mol	323.00	NIST Webbook
srf	0.03	N/m	283.15	Thermophysical Properties of VX and RVX
srf	0.03	N/m	298.15	Thermophysical Properties of VX and RVX
srf	0.03	N/m	308.15	Thermophysical Properties of VX and RVX
srf	0.03	N/m	323.15	Thermophysical Properties of VX and RVX
srf	0.03	N/m	273.15	Thermophysical Properties of VX and RVX

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C50782699&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l
Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws
Thermophysical Properties of VX and RVX:	https://www.doi.org/10.1021/je200891j

Legend

hvapt:	Enthalpy of vaporization at a given temperature
log10ws:	Log10 of Water solubility in mol/l
logp:	Octanol/Water partition coefficient
mcvol:	McGowan's characteristic volume
rinpol:	Non-polar retention indices
ripol:	Polar retention indices
srf:	Surface Tension

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