Arsonous dichloride, methyl-

Other names:	Arsine, dichloromethyl-
	Arsonous dichloride, As-methyl-
	Dichloromethylarsine
	Methylarsine dichloride
	Methylarsonous dichloride
	Methyldichlorarsine
	Methyldichloroarsine
	TL 294
Inchi:	InChI=1S/CH3AsCl2/c1-2(3)4/h1H3
InchiKey:	VXRMBBLRHSRVDK-UHFFFAOYSA-N
Formula:	CH3AsCl2
SMILES:	C[As](Cl)Cl
Mol. weight [g/mol]:	160.86
CAS:	593-89-5

Physical Properties

Property code	Value	Unit	Source
ie	10.40 ± 0.10	eV	NIST Webbook
log10ws	0.79		Crippen Method
logp	1.582		Crippen Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
hvapt	41.00	kJ/mol	293.00	NIST Webbook

Correlations

Information	Value
Property code	pvap
Equation	ln(Pvp) = A + B/(T + C)

Coeff. A	1.68618e+01
Coeff. B	-4.93352e+03
Temperature range (K), min.	297.66
Temperature range (K), max.	427.13

Sources

The Yaws Handbook of Vapor Pressure:	https://www.sciencedirect.com/book/9780128029992/the-yaws-handbook-of-vapor-pressure
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l
Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C593895&Units=SI

Legend

hvapt:	Enthalpy of vaporization at a given temperature
ie:	Ionization energy
log10ws:	Log10 of Water solubility in mol/l
logp:	Octanol/Water partition coefficient
pvap:	Vapor pressure