

Silane, dichlorodiethyl-

Other names:	Diethyldichlorosilicon UN 1767 dichlorodiethylsilane diethyldichlorosilane
Inchi:	InChI=1S/C4H10Cl2Si/c1-3-7(5,6)4-2/h3-4H2,1-2H3
InchiKey:	BYLOHCRAPOSXLY-UHFFFAOYSA-N
Formula:	C4H10Cl2Si
SMILES:	CC[Si](Cl)(Cl)CC
Mol. weight [g/mol]:	157.11
CAS:	1719-53-5

Physical Properties

Property code	Value	Unit	Source
log10ws	-0.44		Crippen Method
logp	2.946		Crippen Method
pc	3060.00 ± 11.14	kPa	NIST Webbook
rhoc	345.65 ± 3.14	kg/m3	NIST Webbook
rinpol	831.00		NIST Webbook
rinpol	809.00		NIST Webbook
rinpol	822.60		NIST Webbook
rinpol	813.00		NIST Webbook
sl	346.10	J/mol×K	NIST Webbook
tc	595.80 ± 0.60	K	NIST Webbook

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpl	214.70	J/mol×K	298.16	NIST Webbook
hfust	8.96	kJ/mol	174.10	NIST Webbook
hfust	8.96	kJ/mol	174.10	NIST Webbook
hvapt	39.20	kJ/mol	361.00	NIST Webbook
sfust	51.46	J/mol×K	174.10	NIST Webbook

Sources

Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307I
Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws
High-pressure phase equilibria for chlorosilane + carbon dioxide mixtures	https://www.doi.org/10.1016/j.fluid.2008.06.017
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C1719535&Units=SI

Legend

cpl:	Liquid phase heat capacity
hfust:	Enthalpy of fusion at a given temperature
hvapt:	Enthalpy of vaporization at a given temperature
log10ws:	Log10 of Water solubility in mol/l
logp:	Octanol/Water partition coefficient
pc:	Critical Pressure
rhoc:	Critical density
rinpol:	Non-polar retention indices
sfust:	Entropy of fusion at a given temperature
sl:	Liquid phase molar entropy at standard conditions
tc:	Critical Temperature

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