

Disilane, hexamethyl-

Other names:	Hexamethyldisilane (CH ₃) ₆ Si ₂ Permethylidisilane CH ₇ 280
Inchi:	InChI=1S/C6H18Si2/c1-7(2,3)8(4,5)6/h1-6H3
InchiKey:	NEXSMEBSBIABKL-UHFFFAOYSA-N
Formula:	C ₆ H ₁₈ Si ₂
SMILES:	C[Si](C)(C)[Si](C)(C)C
Mol. weight [g/mol]:	146.38
CAS:	1450-14-2

Physical Properties

Property code	Value	Unit	Source
ie	8.27 ± 0.05	eV	NIST Webbook
ie	8.69	eV	NIST Webbook
ie	8.69	eV	NIST Webbook
ie	8.70 ± 0.05	eV	NIST Webbook
ie	8.68	eV	NIST Webbook
ie	8.79 ± 0.08	eV	NIST Webbook
ie	8.35 ± 0.12	eV	NIST Webbook
ie	8.00 ± 0.01	eV	NIST Webbook
ie	8.46 ± 0.15	eV	NIST Webbook
ie	8.35 ± 0.12	eV	NIST Webbook
ie	8.00	eV	NIST Webbook
ie	8.40	eV	NIST Webbook
ie	8.27 ± 0.05	eV	NIST Webbook
ie	8.27 ± 0.05	eV	NIST Webbook
log10ws	2.55		Crippen Method
logp	2.741		Crippen Method
rinpol	686.10		NIST Webbook
rinpol	699.00		NIST Webbook
rinpol	698.00		NIST Webbook
rinpol	685.90		NIST Webbook
rinpol	686.10		NIST Webbook
rinpol	698.00		NIST Webbook
tb	386.00	K	NIST Webbook
tb	386.00	K	NIST Webbook

tf	287.70 ± 0.20	K	NIST Webbook
tf	287.22 ± 0.05	K	NIST Webbook
tf	287.10 ± 0.10	K	NIST Webbook

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpl	255.89	J/mol×K	295.67	NIST Webbook
hfust	3.02	kJ/mol	287.70	NIST Webbook
hfust	9.75	kJ/mol	221.80	NIST Webbook
hfust	3.02	kJ/mol	287.70	NIST Webbook
hvapt	36.30	kJ/mol	346.00	NIST Webbook
hvapt	37.20	kJ/mol	299.00	NIST Webbook
hvapt	36.80	kJ/mol	314.00	NIST Webbook
sfust	43.95	J/mol×K	221.80	NIST Webbook
sfust	10.49	J/mol×K	287.70	NIST Webbook

Sources

Crippen Method:

<http://pubs.acs.org/doi/abs/10.1021/ci9903071>

Crippen Method:

https://www.chemeo.com/doc/models/crippen_log10ws

NIST Webbook:

<http://webbook.nist.gov/cgi/cbook.cgi?ID=C1450142&Units=SI>

Legend

cpl:	Liquid phase heat capacity
hfust:	Enthalpy of fusion at a given temperature
hvapt:	Enthalpy of vaporization at a given temperature
ie:	Ionization energy
log10ws:	Log10 of Water solubility in mol/l
logp:	Octanol/Water partition coefficient
rinpol:	Non-polar retention indices
sfust:	Entropy of fusion at a given temperature
tb:	Normal Boiling Point Temperature
tf:	Normal melting (fusion) point

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