

germanium tetrahydride

Other names:	Germane
Inchi:	InChI=1S/GeH4/h1H4
InchiKey:	QUZPNFFHZPRKJD-UHFFFAOYSA-N
Formula:	GeH4
SMILES:	[GeH4]
Mol. weight [g/mol]:	76.67
CAS:	7782-65-2

Physical Properties

Property code	Value	Unit	Source
affp	713.40	kJ/mol	NIST Webbook
basg	687.10	kJ/mol	NIST Webbook
ie	11.31	eV	NIST Webbook
ie	11.34	eV	NIST Webbook
ie	12.00	eV	NIST Webbook
ie	10.53	eV	NIST Webbook
log10ws	3.59		Crippen Method
logp	-1.452		Crippen Method

Correlations

Information	Value
Property code	pvap
Equation	$\ln(P_{vp}) = A + B/(T + C)$
Coeff. A	1.42950e+01
Coeff. B	-1.68644e+03
Coeff. C	-1.07200e+01
Temperature range (K), min.	107.26
Temperature range (K), max.	308.00

Sources

Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C7782652&Units=SI
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

Legend

affp:	Proton affinity
basg:	Gas basicity
ie:	Ionization energy
log10ws:	Log10 of Water solubility in mol/l
logp:	Octanol/Water partition coefficient
pvap:	Vapor pressure

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