Vinyl iodide

Other names: iodoethylene
Inchi: InChI=1S/C2H3I/c1-2-3/h2H,1H2
InchiKey: GHXZPUGJZVBLGC-UHFFFAOYSA-N
Formula: C2H3I
SMILES: C=CI
Mol. weight [g/mol]: 153.95
CAS: 593-66-8

Physical Properties

Property code	Value	Unit	Source
hf	133.14	kJ/mol	Cheméo Relay (1.0)
hfus	4.06	kJ/mol	Joback Method
ie	9.32	eV	NIST Webbook
ie	9.33	eV	NIST Webbook
ie	9.30	eV	NIST Webbook
ie	9.35	eV	NIST Webbook
ie	9.32	eV	NIST Webbook
logp	1.565		Crippen Method
mcvol	60.560	ml/mol	McGowan Method
tb	329.20	K	NIST Webbook
tb	330.15 ± 2.00	K	NIST Webbook
tf	159.69	K	Cheméo Relay (1.0)

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	62.44	J/mol×K	334.98	Joback Method
cpg	66.16	J/mol×K	370.23	Joback Method
cpg	69.59	J/mol×K	405.49	Joback Method
cpg	72.77	J/mol×K	440.74	Joback Method
cpg	75.71	J/mol×K	475.99	Joback Method
cpg	78.43	J/mol×K	511.25	Joback Method
cpg	80.94	J/mol×K	546.50	Joback Method
dvisc	0.0041256	Pa×s	168.60	Joback Method

dvisc	0.0021302	Pa×s	196.33	Joback Method
dvisc	0.0012954	Pa×s	224.06	Joback Method
dvisc	0.0008790	Pa×s	251.79	Joback Method
dvisc	0.0006441	Pa×s	279.52	Joback Method
dvisc	0.0004993	Pa×s	307.25	Joback Method
dvisc	0.0004037	Pa×s	334.98	Joback Method

Correlations

Information	Value
Property code	pvap
Equation	ln(Pvp) = A + B/(T + C)
Coeff. A	1.41879e+01
Coeff. B	-2.85314e+03
Coeff. C	-3.10530e+01
Temperature range (K), min.	236.31
Temperature range (K), max.	352.48

Sources

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

Cheméo Relay (1.0):

Cheméo Relay (1.0, beta):

The Yaws Handbook of Vapor Pressure: https://www.sciencedirect.com/book/9780128029992/the-yaws-handbook-of-vapor-pressure

NIST Webbook: http://webbook.nist.gov/cgi/cbook.cgi?ID=C593668&Units=SI

Joback Method: https://en.wikipedia.org/wiki/Joback_method

McGowan Method: http://link.springer.com/article/10.1007/BF02311772

Crippen Method: http://pubs.acs.org/doi/abs/10.1021/ci990307l

Legend

cpg: Ideal gas heat capacity

dvisc: Dynamic viscosity

hf: Enthalpy of formation at standard conditions

hfus: Enthalpy of fusion at standard conditions

ie:	Ionization energy
logp:	Octanol/Water partition coefficient
mcvol:	McGowan's characteristic volume
pvap:	Vapor pressure
tb:	Normal Boiling Point Temperature
tf:	Normal melting (fusion) point