1,2-diiodoethene

Inchi: InChI=1S/C2H2I2/c3-1-2-4/h1-2H
InchiKey: CVOGMKGEVNGRSK-UHFFFAOYSA-N
Formula: C2H2I2
SMILES: IC=CI
Mol. weight [g/mol]: 279.85

Physical Properties

Property code	Value	Unit	Source
gf	162.42	kJ/mol	Joback Method
hf	186.35	kJ/mol	Joback Method
hfus	9.95	kJ/mol	Joback Method
hvap	38.75	kJ/mol	Joback Method
log10ws	-3.22		Aqueous Solubility Prediction Method
logp	2.328		Crippen Method
mcvol	86.380	ml/mol	McGowan Method
pc	5087.49	kPa	Joback Method
tb	435.60	K	Joback Method
tc	702.05	K	Joback Method
tf	223.34	K	Joback Method
vc	0.303	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	86.01	J/mol×K	435.60	Joback Method
cpg	89.39	J/mol×K	480.01	Joback Method
cpg	92.26	J/mol×K	524.42	Joback Method
cpg	94.69	J/mol×K	568.82	Joback Method
cpg	96.75	J/mol×K	613.23	Joback Method
cpg	98.52	J/mol×K	657.64	Joback Method
cpg	100.07	J/mol×K	702.05	Joback Method
dvisc	0.0055710	Pa×s	223.34	Joback Method
dvisc	0.0026954	Pa×s	258.72	Joback Method

dvisc	0.0015530	Pa×s	294.09	Joback Method
dvisc	0.0010073	Pa×s	329.47	Joback Method
dvisc	0.0007105	Pa×s	364.85	Joback Method
dvisc	0.0005331	Pa×s	400.22	Joback Method
dvisc	0.0004191	Pa×s	435.60	Joback Method

Sources

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

Aqueous Solubility Prediction Method: http://onschallenge.wikispaces.com/file/view/AqueousDataset002.xlsx/351826032/AqueousDa

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
gf: Standard Gibbs free energy of formation
hf: Enthalpy of formation at standard conditions
hfus: Enthalpy of fusion at standard conditions
hvap: Enthalpy of vaporization at standard conditions
log10ws: Log10 of Water solubility in mol/l
logp: Octanol/Water partition coefficient
mcvol: McGowan's characteristic volume
pc: Critical Pressure
tb: Normal Boiling Point Temperature
tc: Critical Temperature
tf: Normal melting (fusion) point
vc: Critical Volume