EtCH=CH

Inchi: InChI=1S/C4H7/c1-3-4-2/h1,3H,4H2,2H3
InchiKey: JUPMBRMEHSUGLE-UHFFFAOYSA-N
Formula: C4H7
SMILES: [CH]=CCC
Mol. weight [g/mol]: 55.10
CAS: 2669-61-6

Physical Properties

Property code	Value	Unit	Source
ea	0.72 ± 0.23	eV	NIST Webbook
gf	115.40	kJ/mol	Joback Method
hf	47.14	kJ/mol	Joback Method
hfus	8.00	kJ/mol	Joback Method
hvap	24.31	kJ/mol	Joback Method
log10ws	-0.98		Crippen Method
logp	1.386		Crippen Method
mcvol	60.770	ml/mol	McGowan Method
pc	4409.10	kPa	Joback Method
tb	294.38	K	Joback Method
tc	461.93	K	Joback Method
tf	146.13	K	Joback Method
vc	0.231	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	76.77	J/mol×K	294.38	Joback Method
cpg	84.10	J/mol×K	322.30	Joback Method
cpg	90.97	J/mol×K	350.23	Joback Method
cpg	97.40	J/mol×K	378.15	Joback Method
cpg	103.42	J/mol×K	406.08	Joback Method
cpg	109.04	J/mol×K	434.00	Joback Method
cpg	114.30	J/mol×K	461.93	Joback Method
dvisc	0.0002849	Pa×s	146.13	Joback Method

dvisc	0.0002316	Pa×s	170.84	Joback Method
dvisc	0.0001984	Pa×s	195.55	Joback Method
dvisc	0.0001760	Pa×s	220.25	Joback Method
dvisc	0.0001599	Pa×s	244.96	Joback Method
dvisc	0.0001479	Pa×s	269.67	Joback Method
dvisc	0.0001386	Pa×s	294.38	Joback Method

Sources

Joback Method:	https://en.wikipedia.org/wiki/Joback_method
McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C2669616&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l
Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws

Legend

cpg:	Ideal gas heat capacity
dvisc:	Dynamic viscosity
ea:	Electron affinity
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