

2-Butene, 1,4-dichloro-, (Z)-

Other names:	cis-1,4-dichlorobut-2-ene
Inchi:	InChI=1S/C4H6Cl2/c5-3-1-2-4-6/h1-2H,3-4H2/b2-1-
InchiKey:	FQDIANVAWVHZIR-UPHRSURJSA-N
Formula:	C4H6Cl2
SMILES:	CICC=CCCI
Mol. weight [g/mol]:	125.00
CAS:	1476-11-5

Physical Properties

Property code	Value	Unit	Source
gf	39.16	kJ/mol	Joback Method
hf	-40.15	kJ/mol	Joback Method
hfus	14.71	kJ/mol	Joback Method
hvap	33.23	kJ/mol	Joback Method
log10ws	-1.66		Crippen Method
logp	2.020		Crippen Method
mcvol	87.400	ml/mol	McGowan Method
pc	3791.65	kPa	Joback Method
tb	425.70	K	NIST Webbook
tc	561.81	K	Joback Method
tf	231.20 ± 2.00	K	NIST Webbook
vc	0.338	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	126.84	J/molxK	369.94	Joback Method
cpg	133.79	J/molxK	401.92	Joback Method
cpg	140.33	J/molxK	433.90	Joback Method
cpg	146.50	J/molxK	465.87	Joback Method
cpg	152.30	J/molxK	497.85	Joback Method
cpg	157.76	J/molxK	529.83	Joback Method
cpg	162.91	J/molxK	561.81	Joback Method
dvisc	0.0037801	Paxs	189.60	Joback Method

dvisc	0.0018290	Paxs	219.66	Joback Method
dvisc	0.0010539	Paxs	249.71	Joback Method
dvisc	0.0006837	Paxs	279.77	Joback Method
dvisc	0.0004823	Paxs	309.83	Joback Method
dvisc	0.0003620	Paxs	339.88	Joback Method
dvisc	0.0002846	Paxs	369.94	Joback Method

Pressure Dependent Properties

Property code	Value	Unit	Pressure [kPa]	Source
tbrp	425.20	K	101.00	NIST Webbook
tbrp	295.70	K	0.40	NIST Webbook

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C1476115&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307i
Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws
Joback Method:	https://en.wikipedia.org/wiki/Joback_method

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
mccvol:	McGowan's characteristic volume
pc:	Critical Pressure
tb:	Normal Boiling Point Temperature
tbrp:	Boiling point at reduced pressure

tc: Critical Temperature
tf: Normal melting (fusion) point
vc: Critical Volume

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