Cyclohexane, (2-bromoethyl)-

Other names: (2-Bromoethyl)cyclohexane
2-Cyclohexylethyl bromide
Inchi: InChI=1S/C8H15Br/c9-7-6-8-4-2-1-3-5-8/h8H,1-7H2
InchiKey: JRQAAYVLPPGEHT-UHFFFAOYSA-N
Formula: C8H15Br
SMILES: BrCCC1CCCCC1
Mol. weight [g/mol]: 191.11
CAS: 1647-26-3

Physical Properties

Property code	Value	Unit	Source
gf	55.25	kJ/mol	Joback Method
hf	-127.80	kJ/mol	Joback Method
hfus	13.60	kJ/mol	Joback Method
hvap	40.27	kJ/mol	Joback Method
log10ws	-3.26		Crippen Method
logp	3.352		Crippen Method
mcvol	130.220	ml/mol	McGowan Method
pc	3411.87	kPa	Joback Method
tb	468.15	K	Joback Method
tc	687.95	K	Joback Method
tf	247.10	K	Joback Method
vc	0.478	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	348.68	J/mol×K	687.95	Joback Method
cpg	260.36	J/mol×K	468.15	Joback Method
cpg	277.44	J/mol×K	504.78	Joback Method
cpg	293.52	J/mol×K	541.42	Joback Method
cpg	308.65	J/mol×K	578.05	Joback Method
cpg	322.87	J/mol×K	614.68	Joback Method
cpg	336.20	J/mol×K	651.32	Joback Method

dvisc	0.0003429	Pa×s	468.15	Joback Method
dvisc	0.0057192	Pa×s	247.10	Joback Method
dvisc	0.0026392	Pa×s	283.94	Joback Method
dvisc	0.0014547	Pa×s	320.78	Joback Method
dvisc	0.0009065	Pa×s	357.62	Joback Method
dvisc	0.0006170	Pa×s	394.47	Joback Method
dvisc	0.0004486	Pa×s	431.31	Joback Method
hvapt	54.20	kJ/mol	398.50	NIST Webbook

Correlations

Information	Value
Property code	pvap
Equation	ln(Pvp) = A + B/(T + C)
Coeff. A	1.26376e+01
Coeff. B	-3.33799e+03
Coeff. C	-8.39030e+01
Temperature range (K), min.	354.19
Temperature range (K), max.	539.53

Sources

NIST Webbook: http://webbook.nist.gov/cgi/cbook.cgi?ID=C1647263&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

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

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

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

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
hvapt:	Enthalpy of vaporization at a given temperature
log10ws:	Log10 of Water solubility in mol/l
logp:	Octanol/Water partition coefficient
mcvol:	McGowan's characteristic volume
pc:	Critical Pressure
pvap:	Vapor pressure
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume