8-Bromo-1-octene

Other names: 1-Octene, 8-bromo-
8-bromooct-1-ene
bromo-8 octene-1
Inchi: InChI=1S/C8H15Br/c1-2-3-4-5-6-7-8-9/h2H,1,3-8H2
InchiKey: SNMOMUYLFLGQQS-UHFFFAOYSA-N
Formula: C8H15Br
SMILES: C=CCCCCCCBr
Mol. weight [g/mol]: 191.11
CAS: 2695-48-9

Physical Properties

Property code	Value	Unit	Source
gf	118.64	kJ/mol	Joback Method
hf	-56.69	kJ/mol	Joback Method
hfus	20.48	kJ/mol	Joback Method
hvap	39.17	kJ/mol	Joback Method
log10ws	-3.46		Crippen Method
logp	3.518		Crippen Method
mcvol	136.780	ml/mol	McGowan Method
pc	2844.44	kPa	Joback Method
rinpol	1121.00		NIST Webbook
ripol	1455.00		NIST Webbook
tb	445.28	K	Joback Method
tc	629.95	K	Joback Method
tf	237.96	K	Joback Method
vc	0.526	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	260.72	J/mol×K	445.28	Joback Method
cpg	273.11	J/mol×K	476.06	Joback Method
cpg	284.90	J/mol×K	506.84	Joback Method
cpg	296.12	J/mol×K	537.62	Joback Method

cpg	306.81	J/mol×K	568.39	Joback Method
cpg	316.97	J/mol×K	599.17	Joback Method
cpg	326.63	J/mol×K	629.95	Joback Method
dvisc	0.0038141	Pa×s	237.96	Joback Method
dvisc	0.0019249	Pa×s	272.51	Joback Method
dvisc	0.0011331	Pa×s	307.07	Joback Method
dvisc	0.0007425	Pa×s	341.62	Joback Method
dvisc	0.0005258	Pa×s	376.17	Joback Method
dvisc	0.0003946	Pa×s	410.73	Joback Method
dvisc	0.0003097	Pa×s	445.28	Joback Method

Correlations

Information	Value
Property code	pvap
Equation	ln(Pvp) = A + B/(T + C)
Coeff. A	1.79528e+01
Coeff. B	-5.10279e+03
Coeff. C	-7.42980e+01
Temperature range (K), min.	363.16
Temperature range (K), max.	477.96

Sources

NIST Webbook: http://webbook.nist.gov/cgi/cbook.cgi?ID=C2695489&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
log10ws:	Log10 of Water solubility in mol/l
logp:	Octanol/Water partition coefficient
mcvol:	McGowan's characteristic volume
pc:	Critical Pressure
pvap:	Vapor pressure
rinpol:	Non-polar retention indices
ripol:	Polar retention indices
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume