2,3-Dibromo-2,3-dimethylbutane

Other names: Butane, 2,3-dibromo-2,3-dimethyl-
Inchi: InChI=1S/C6H12Br2/c1-5(2,7)6(3,4)8/h1-4H3
InchiKey: KLFWZEFFWWOMIF-UHFFFAOYSA-N
Formula: C6H12Br2
SMILES: CC(C)(Br)C(C)(C)Br
Mol. weight [g/mol]: 243.97
CAS: 594-81-0

Physical Properties

Property code	Value	Unit	Source
gf	33.96	kJ/mol	Joback Method
hf	-132.01	kJ/mol	Joback Method
hfus	7.04	kJ/mol	Joback Method
hvap	39.23	kJ/mol	Joback Method
log10ws	-3.42		Crippen Method
logp	3.333		Crippen Method
mcvol	130.400	ml/mol	McGowan Method
pc	3819.82	kPa	Joback Method
rinpol	1054.00		NIST Webbook
rinpol	1054.00		NIST Webbook
tb	462.54	K	Joback Method
tc	692.70	K	Joback Method
tf	435.15 ± 3.00	K	NIST Webbook
vc	0.473	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	240.16	J/mol×K	462.54	Joback Method
cpg	293.45	J/mol×K	654.34	Joback Method
cpg	284.66	J/mol×K	615.98	Joback Method
cpg	275.03	J/mol×K	577.62	Joback Method
cpg	264.46	J/mol×K	539.26	Joback Method
cpg	252.87	J/mol×K	500.90	Joback Method

cpg	301.49	J/mol×K	692.70	Joback Method
dvisc	0.0003786	Pa×s	462.54	Joback Method
dvisc	0.0005061	Pa×s	432.42	Joback Method
dvisc	0.0007064	Pa×s	402.30	Joback Method
dvisc	0.0010406	Pa×s	372.18	Joback Method
dvisc	0.0016413	Pa×s	342.06	Joback Method
dvisc	0.0028269	Pa×s	311.94	Joback Method
dvisc	0.0054690	Pa×s	281.82	Joback Method

Correlations

Information	Value
Property code	pvap
Equation	ln(Pvp) = A + B/(T + C)
Coeff. A	1.43897e+01
Coeff. B	-3.97648e+03
Coeff. C	-7.35200e+01
Temperature range (K), min.	355.50
Temperature range (K), max.	511.54

Sources

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

NIST Webbook: http://webbook.nist.gov/cgi/cbook.cgi?ID=C594810&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

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