

Isobutyraldehyde isobutylhydrazone

Inchi:	InChI=1S/C8H18N2/c1-7(2)5-9-10-6-8(3)4/h5,7-8,10H,6H2,1-4H3/b9-5+
InchiKey:	GKLDBVSGPOBVQI-WEVVVXLNSA-N
Formula:	C8H18N2
SMILES:	CC(C)C=NNCC(C)C
Mol. weight [g/mol]:	142.24
CAS:	21041-71-4

Physical Properties

Property code	Value	Unit	Source
chl	-5662.20 ± 0.80	kJ/mol	NIST Webbook
hf	-83.32	kJ/mol	Joback Method
hfl	-58.20 ± 0.80	kJ/mol	NIST Webbook
hvap	42.38	kJ/mol	Joback Method
log10ws	-2.03		Crippen Method
logp	1.874		Crippen Method
mcvol	139.240	ml/mol	McGowan Method
pc	2351.92	kPa	Joback Method
tb	508.41	K	Joback Method
tc	703.33	K	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
hvapt	57.20	kJ/mol	300.50	NIST Webbook

Sources

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

chl:	Standard liquid enthalpy of combustion
hf:	Enthalpy of formation at standard conditions
hfl:	Liquid phase enthalpy of formation 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
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature

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