

(Z)-3-Hexenyl isobutyrate

Inchi: InChI=1S/C10H18O2/c1-4-5-6-7-8-12-10(11)9(2)3/h6-7,9H,4-5,8H2,1-3H3/b7-6-
InchiKey: DSFNTAVCWZDPEB-SREVYHEPSA-N
Formula: C10H18O2
SMILES: CCCC=CCOC(=O)C(C)C
Mol. weight [g/mol]: 170.25

Physical Properties

Property code	Value	Unit	Source
gf	-122.82	kJ/mol	Joback Method
hf	-382.59	kJ/mol	Joback Method
hfus	21.12	kJ/mol	Joback Method
hvap	46.58	kJ/mol	Joback Method
log10ws	-2.48		Crippen Method
logp	2.542		Crippen Method
mcvol	154.900	ml/mol	McGowan Method
pc	2329.27	kPa	Joback Method
ripol	1144.00		NIST Webbook
ripol	1121.00		NIST Webbook
ripol	1129.00		NIST Webbook
ripol	1121.00		NIST Webbook
ripol	1377.00		NIST Webbook
ripol	1381.00		NIST Webbook
ripol	1377.00		NIST Webbook
ripol	1380.00		NIST Webbook
ripol	1380.00		NIST Webbook
ripol	1364.00		NIST Webbook
ripol	1378.00		NIST Webbook
ripol	1381.00		NIST Webbook
ripol	1378.00		NIST Webbook
tb	508.21	K	Joback Method
tc	691.70	K	Joback Method
tf	254.54	K	Joback Method
vc	0.594	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	350.97	J/molxK	508.21	Joback Method
cpg	415.79	J/molxK	661.12	Joback Method
cpg	404.00	J/molxK	630.54	Joback Method
cpg	391.64	J/molxK	599.96	Joback Method
cpg	378.69	J/molxK	569.37	Joback Method
cpg	365.14	J/molxK	538.79	Joback Method
cpg	427.02	J/molxK	691.70	Joback Method
dvisc	0.0001776	Paxs	508.21	Joback Method
dvisc	0.0002378	Paxs	465.93	Joback Method
dvisc	0.0003375	Paxs	423.65	Joback Method
dvisc	0.0005176	Paxs	381.38	Joback Method
dvisc	0.0008832	Paxs	339.10	Joback Method
dvisc	0.0017548	Paxs	296.82	Joback Method
dvisc	0.0043796	Paxs	254.54	Joback Method

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=R196840&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci9903071

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
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

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