

n-Butyric acid tetrahydrofurfuryl ester

Other names:	2-Furanmethanol, tetrahydro-, propanoate 2-Furanemethanol, tetrahydro-, propanoate Tetrahydrofurfuryl alcohol propionate Tetrahydrofurfuryl propionate
Inchi:	InChI=1S/C8H14O3/c1-2-8(9)11-6-7-4-3-5-10-7/h7H,2-6H2,1H3
InchiKey:	FMKCDSXOYLWBR-UHFFFAOYSA-N
Formula:	C8H14O3
SMILES:	CCC(=O)OCC1CCCO1
Mol. weight [g/mol]:	158.19
CAS:	637-65-0

Physical Properties

Property code	Value	Unit	Source
gf	-267.01	kJ/mol	Joback Method
hf	-524.77	kJ/mol	Joback Method
hfus	21.18	kJ/mol	Joback Method
hvap	47.33	kJ/mol	Joback Method
log10ws	-1.13		Crippen Method
logp	1.119		Crippen Method
mcvol	126.030	ml/mol	McGowan Method
pc	3195.54	kPa	Joback Method
rinpol	1153.00		NIST Webbook
ripol	1632.00		NIST Webbook
tb	478.70	K	NIST Webbook
tc	703.64	K	Joback Method
tf	289.55	K	Joback Method
vc	0.469	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	293.97	J/mol×K	500.96	Joback Method
cpg	308.60	J/mol×K	534.74	Joback Method
cpg	322.51	J/mol×K	568.52	Joback Method

cpg	335.72	J/mol×K	602.30	Joback Method
cpg	348.23	J/mol×K	636.08	Joback Method
cpg	360.07	J/mol×K	669.86	Joback Method
cpg	371.24	J/mol×K	703.64	Joback Method
dvisc	0.0034626	Paxs	289.55	Joback Method
dvisc	0.0019229	Paxs	324.79	Joback Method
dvisc	0.0011982	Paxs	360.02	Joback Method
dvisc	0.0008123	Paxs	395.25	Joback Method
dvisc	0.0005869	Paxs	430.49	Joback Method
dvisc	0.0004454	Paxs	465.72	Joback Method
dvisc	0.0003514	Paxs	500.96	Joback Method

Pressure Dependent Properties

Property code	Value	Unit	Pressure [kPa]	Source
tbrp	359.20	K	0.40	NIST Webbook

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C637650&Units=SI
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

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
tbrp:	Boiling point at reduced pressure
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume

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