

Cycloheptane, butyl

Inchi:	InChI=1S/C11H22/c1-2-3-8-11-9-6-4-5-7-10-11/h11H,2-10H2,1H3
InchiKey:	LRWGCEBGEHKILW-UHFFFAOYSA-N
Formula:	C11H22
SMILES:	CCCCC1CCCCC1
Mol. weight [g/mol]:	154.29

Physical Properties

Property code	Value	Unit	Source
gf	54.09	kJ/mol	Joback Method
hf	-222.21	kJ/mol	Joback Method
hfus	13.98	kJ/mol	Joback Method
hvap	40.68	kJ/mol	Joback Method
log10ws	-4.08		Crippen Method
logp	4.147		Crippen Method
mcvol	154.990	ml/mol	McGowan Method
pc	2393.53	kPa	Joback Method
rinpol	1171.00		NIST Webbook
tb	474.90	K	Joback Method
tc	676.93	K	Joback Method
tf	217.59	K	Joback Method
vc	0.577	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	346.93	J/mol×K	474.90	Joback Method
cpg	368.29	J/mol×K	508.57	Joback Method
cpg	388.61	J/mol×K	542.24	Joback Method
cpg	407.91	J/mol×K	575.92	Joback Method
cpg	426.23	J/mol×K	609.59	Joback Method
cpg	443.57	J/mol×K	643.26	Joback Method
cpg	459.97	J/mol×K	676.93	Joback Method
dvisc	0.0138769	Paxs	217.59	Joback Method
dvisc	0.0038812	Paxs	260.48	Joback Method

dvisc	0.0015562	Paxs	303.36	Joback Method
dvisc	0.0007825	Paxs	346.25	Joback Method
dvisc	0.0004579	Paxs	389.13	Joback Method
dvisc	0.0002980	Paxs	432.01	Joback Method
dvisc	0.0002096	Paxs	474.90	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=R133092&Units=SI
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
mccvol:	McGowan's characteristic volume
pc:	Critical Pressure
rinpol:	Non-polar retention indices
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume

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