

3-Decen-1-yne, (Z)-

Inchi:	InChI=1S/C10H16/c1-3-5-7-9-10-8-6-4-2/h1,5,7H,4,6,8-10H2,2H3/b7-5-
InchiKey:	OMLUZGAUTCIZLU-ALCCZGGFSA-N
Formula:	C10H16
SMILES:	C#CC=CCCCCCC
Mol. weight [g/mol]:	136.23
CAS:	61827-88-1

Physical Properties

Property code	Value	Unit	Source
gf	336.61	kJ/mol	Joback Method
hf	159.39	kJ/mol	Joback Method
hfus	24.83	kJ/mol	Joback Method
hvap	37.67	kJ/mol	Joback Method
log10ws	-3.66		Crippen Method
logp	3.146		Crippen Method
mcvol	138.860	ml/mol	McGowan Method
pc	2555.92	kPa	Joback Method
tb	422.48	K	Joback Method
tc	604.51	K	Joback Method
tf	244.35	K	Joback Method
vc	0.537	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	271.15	J/molxK	422.48	Joback Method
cpg	284.94	J/molxK	452.82	Joback Method
cpg	298.06	J/molxK	483.16	Joback Method
cpg	310.54	J/molxK	513.49	Joback Method
cpg	322.41	J/molxK	543.83	Joback Method
cpg	333.70	J/molxK	574.17	Joback Method
cpg	344.43	J/molxK	604.51	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=C61827881&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci9903071

Legend

cpg:	Ideal gas heat capacity
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
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume

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