

Cyclopentene,3-hexyl-

Other names:	3-Hexyl-1-cyclopentene
Inchi:	InChI=1S/C11H20/c1-2-3-4-5-8-11-9-6-7-10-11/h6,9,11H,2-5,7-8,10H2,1H3
InchiKey:	SBLGWRRUSIBTTF-UHFFFAOYSA-N
Formula:	C11H20
SMILES:	CCCCCCC1C=CCC1
Mol. weight [g/mol]:	152.28
CAS:	37689-18-2

Physical Properties

Property code	Value	Unit	Source
gf	108.25	kJ/mol	Joback Method
hf	-152.11	kJ/mol	Joback Method
hfus	19.40	kJ/mol	Joback Method
hvap	40.63	kJ/mol	Joback Method
ie	8.84 ± 0.02	eV	NIST Webbook
log10ws	-3.93		Crippen Method
logp	3.923		Crippen Method
mcvol	150.690	ml/mol	McGowan Method
pc	2361.07	kPa	Joback Method
ripol	1116.00		NIST Webbook
ripol	1109.00		NIST Webbook
ripol	1229.00		NIST Webbook
ripol	1242.00		NIST Webbook
ripol	1246.00		NIST Webbook
ripol	1221.00		NIST Webbook
ripol	1232.00		NIST Webbook
ripol	1229.10		NIST Webbook
ripol	1259.00		NIST Webbook
ripol	1248.00		NIST Webbook
ripol	1241.70		NIST Webbook
ripol	1245.50		NIST Webbook
ripol	1220.70		NIST Webbook
ripol	1225.10		NIST Webbook
ripol	1240.00		NIST Webbook
ripol	1244.00		NIST Webbook
ripol	1240.00		NIST Webbook
ripol	1237.00		NIST Webbook

ripol	1233.00		NIST Webbook
ripol	1225.00		NIST Webbook
ripol	1237.20		NIST Webbook
ripol	1233.30		NIST Webbook
tb	465.52	K	Joback Method
tc	654.75	K	Joback Method
tf	225.39	K	Joback Method
vc	0.579	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	330.78	J/molxK	465.52	Joback Method
cpg	348.91	J/molxK	497.06	Joback Method
cpg	366.14	J/molxK	528.60	Joback Method
cpg	382.52	J/molxK	560.14	Joback Method
cpg	398.08	J/molxK	591.68	Joback Method
cpg	412.84	J/molxK	623.21	Joback Method
cpg	426.84	J/molxK	654.75	Joback Method
dvisc	0.0041415	Paxs	225.39	Joback Method
dvisc	0.0019043	Paxs	265.41	Joback Method
dvisc	0.0010733	Paxs	305.43	Joback Method
dvisc	0.0006909	Paxs	345.45	Joback Method
dvisc	0.0004873	Paxs	385.48	Joback Method
dvisc	0.0003671	Paxs	425.50	Joback Method
dvisc	0.0002903	Paxs	465.52	Joback Method

Sources

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=C37689182&Units=SI>

Crippen Method:

<http://pubs.acs.org/doi/abs/10.1021/ci9903071>

Crippen Method:

https://www.chemeo.com/doc/models/crippen_log10ws

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
ie:	Ionization energy
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

Latest version available from:

<https://www.cheméo.com/cid/68-559-7/Cyclopentene-3-hexyl.pdf>

Generated by Cheméo on 2024-04-25 06:32:14.287624793 +0000 UTC m=+16315983.208202115.

Cheméo (<https://www.cheméo.com>) is the biggest free database of chemical and physical data for the process industry.