

Cyclopentane, pentylidene-

Other names:	Cyclopentane, pentenylidene
Inchi:	InChI=1S/C10H18/c1-2-3-4-7-10-8-5-6-9-10/h7H,2-6,8-9H2,1H3
InchiKey:	UUTALBLZKWDFDU-UHFFFAOYSA-N
Formula:	C10H18
SMILES:	CCCCC=C1CCCC1
Mol. weight [g/mol]:	138.25
CAS:	53366-55-5

Physical Properties

Property code	Value	Unit	Source
gf	123.04	kJ/mol	Joback Method
hf	-92.88	kJ/mol	Joback Method
hfus	14.84	kJ/mol	Joback Method
hvap	39.21	kJ/mol	Joback Method
log10ws	-3.76		Crippen Method
logp	3.677		Crippen Method
mcvol	136.600	ml/mol	McGowan Method
pc	2668.02	kPa	Joback Method
rinpol	1049.00		NIST Webbook
rinpol	1045.00		NIST Webbook
tb	454.79	K	Joback Method
tc	651.44	K	Joback Method
tf	227.96	K	Joback Method
vc	0.520	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	286.67	J/mol×K	454.79	Joback Method
cpg	363.25	J/mol×K	618.67	Joback Method
cpg	349.56	J/mol×K	585.89	Joback Method
cpg	335.10	J/mol×K	553.12	Joback Method
cpg	319.82	J/mol×K	520.34	Joback Method
cpg	303.69	J/mol×K	487.57	Joback Method

cpg	376.20	J/molxK	651.44	Joback Method
dvisc	0.0002604	Paxs	454.79	Joback Method
dvisc	0.0003374	Paxs	416.99	Joback Method
dvisc	0.0004604	Paxs	379.18	Joback Method
dvisc	0.0006729	Paxs	341.38	Joback Method
dvisc	0.0010811	Paxs	303.57	Joback Method
dvisc	0.0019876	Paxs	265.76	Joback Method
dvisc	0.0044723	Paxs	227.96	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C53366555&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci9903071
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
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume

Latest version available from:

<https://www.chemeo.com/cid/76-724-4/Cyclopentane-pentylidene.pdf>

Generated by Cheméo on 2024-04-17 17:29:42.70669048 +0000 UTC m=+15664231.627267796.

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