

1,5-Heptadiene, (Z)-

Other names:	(5Z)-1,5-Heptadiene 1,cis-5-Heptadiene
Inchi:	InChI=1S/C7H12/c1-3-5-7-6-4-2/h3-4,6H,1,5,7H2,2H3/b6-4-
InchiKey:	ZGXMNEKDFYUNDQ-XQRVVYSFSA-N
Formula:	C7H12
SMILES:	C=CCCC=CC
Mol. weight [g/mol]:	96.17
CAS:	7736-34-7

Physical Properties

Property code	Value	Unit	Source
gf	176.12	kJ/mol	Joback Method
hf	54.84	kJ/mol	Joback Method
hfus	12.81	kJ/mol	Joback Method
hvap	30.46	kJ/mol	Joback Method
log10ws	-2.46		Crippen Method
logp	2.529		Crippen Method
mcvol	100.890	ml/mol	McGowan Method
pc	3100.18	kPa	Joback Method
rinpol	683.00		NIST Webbook
rinpol	688.10		NIST Webbook
rinpol	684.50		NIST Webbook
tb	360.40	K	Joback Method
tc	536.35	K	Joback Method
tf	161.81	K	Joback Method
vc	0.389	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	166.57	J/mol×K	360.40	Joback Method
cpg	177.68	J/mol×K	389.72	Joback Method
cpg	188.27	J/mol×K	419.05	Joback Method
cpg	198.35	J/mol×K	448.37	Joback Method

cpg	207.96	J/mol×K	477.70	Joback Method
cpg	217.10	J/mol×K	507.02	Joback Method
cpg	225.80	J/mol×K	536.35	Joback Method
dvisc	0.0037899	Pa×s	161.81	Joback Method
dvisc	0.0015040	Pa×s	194.91	Joback Method
dvisc	0.0007806	Pa×s	228.01	Joback Method
dvisc	0.0004784	Pa×s	261.11	Joback Method
dvisc	0.0003273	Pa×s	294.20	Joback Method
dvisc	0.0002418	Pa×s	327.30	Joback Method
dvisc	0.0001889	Pa×s	360.40	Joback Method

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C7736347&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
McGowan Method:	http://link.springer.com/article/10.1007/BF02311772

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/42-240-8/1-5-Heptadiene-Z.pdf>

Generated by Cheméo on 2025-12-05 18:08:16.19277539 +0000 UTC m=+4706293.722816064.

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