

3-Undecene, (E)-

Other names:	(E)-3-Undecene trans-3-Undecene 3-Undecene, trans-
Inchi:	InChI=1S/C11H22/c1-3-5-7-9-11-10-8-6-4-2/h5,7H,3-4,6,8-11H2,1-2H3/b7-5+
InchiKey:	SDTYFWAQLSIEBH-FNORWQNLSA-N
Formula:	C11H22
SMILES:	CCC=CCCCCCCC
Mol. weight [g/mol]:	154.29
CAS:	1002-68-2

Physical Properties

Property code	Value	Unit	Source
gf	121.96	kJ/mol	Joback Method
hf	-153.15	kJ/mol	Joback Method
hfus	24.45	kJ/mol	Joback Method
hvap	40.04	kJ/mol	Joback Method
log10ws	-4.28		Crippen Method
logp	4.313		Crippen Method
mcvol	161.550	ml/mol	McGowan Method
pc	2025.41	kPa	Joback Method
rinpol	1087.00		NIST Webbook
rinpol	1092.00		NIST Webbook
rinpol	1091.00		NIST Webbook
rinpol	1091.00		NIST Webbook
rinpol	1092.00		NIST Webbook
rinpol	1085.00		NIST Webbook
rinpol	1088.80		NIST Webbook
rinpol	1086.00		NIST Webbook
rinpol	1086.00		NIST Webbook
rinpol	1085.00		NIST Webbook
rinpol	1085.00		NIST Webbook
rinpol	1094.00		NIST Webbook
rinpol	1085.00		NIST Webbook
rinpol	1085.00		NIST Webbook
ripol	1155.00		NIST Webbook
ripol	1137.00		NIST Webbook
ripol	1146.70		NIST Webbook

ripol	1142.00		NIST Webbook
ripol	1146.00		NIST Webbook
ripol	1146.00		NIST Webbook
ripol	1147.00		NIST Webbook
ripol	1146.00		NIST Webbook
ripol	1142.00		NIST Webbook
ripol	1142.00		NIST Webbook
ripol	1142.00		NIST Webbook
ripol	1142.00		NIST Webbook
ripol	1141.00		NIST Webbook
ripol	1145.70		NIST Webbook
ripol	1146.70		NIST Webbook
ripol	1145.50		NIST Webbook
ripol	1145.70		NIST Webbook
ripol	1146.70		NIST Webbook
ripol	1145.50		NIST Webbook
ripol	1137.00		NIST Webbook
ripol	1155.00		NIST Webbook
ripol	1146.00		NIST Webbook
tb	455.24	K	Joback Method
tc	624.41	K	Joback Method
tf	208.65	K	Joback Method
vc	0.631	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	430.08	J/molxK	624.41	Joback Method
cpg	417.34	J/molxK	596.22	Joback Method
cpg	404.02	J/molxK	568.02	Joback Method
cpg	390.12	J/molxK	539.83	Joback Method
cpg	375.59	J/molxK	511.63	Joback Method
cpg	360.43	J/molxK	483.44	Joback Method
cpg	344.60	J/molxK	455.24	Joback Method
dvisc	0.0058574	Paxs	208.65	Joback Method
dvisc	0.0001891	Paxs	455.24	Joback Method
dvisc	0.0002523	Paxs	414.14	Joback Method
dvisc	0.0003587	Paxs	373.04	Joback Method
dvisc	0.0005563	Paxs	331.95	Joback Method
dvisc	0.0009768	Paxs	290.85	Joback Method
dvisc	0.0020642	Paxs	249.75	Joback Method

Sources

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
McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C1002682&Units=SI

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
hvapt:	Enthalpy of vaporization at a given temperature
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

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