2-Tridecene, (Z)

Other names: (2Z)-2-Tridecene
cis-2-Tridecene
(Z)-2-Tridecene
Inchi: InChI=1S/C13H26/c1-3-5-7-9-11-13-12-10-8-6-4-2/h3,5H,4,6-13H2,1-2H3/b5-3-
InchiKey: XWVHBWQEYOROBE-HYXAFXHYSA-N
Formula: C13H26
SMILES: CC=CCCCCCCCCCC
Mol. weight [g/mol]: 182.35
CAS: 41446-59-7

Physical Properties

Property code	Value	Unit	Source
gf	138.80	kJ/mol	Joback Method
hf	-194.43	kJ/mol	Joback Method
hfus	29.63	kJ/mol	Joback Method
hvap	44.49	kJ/mol	Joback Method
log10ws	-5.12		Crippen Method
logp	5.093		Crippen Method
mcvol	189.730	ml/mol	McGowan Method
pc	1716.03	kPa	Joback Method
rinpol	1302.00		NIST Webbook
rinpol	1301.00		NIST Webbook
rinpol	1301.50		NIST Webbook
rinpol	1313.00		NIST Webbook
rinpol	1302.00		NIST Webbook
rinpol	1302.00		NIST Webbook
rinpol	1304.00		NIST Webbook
rinpol	1315.00		NIST Webbook
rinpol	1311.00		NIST Webbook
rinpol	1302.00		NIST Webbook
rinpol	1304.00		NIST Webbook
rinpol	1302.00		NIST Webbook
rinpol	1315.00		NIST Webbook
ripol	1367.00		NIST Webbook
ripol	1367.30		NIST Webbook
ripol	1379.00		NIST Webbook
ripol	1381.00		NIST Webbook

ripol	1360.50		NIST Webbook
ripol	1363.70		NIST Webbook
ripol	1365.60		NIST Webbook
ripol	1356.00		NIST Webbook
ripol	1365.00		NIST Webbook
ripol	1366.00		NIST Webbook
ripol	1382.00		NIST Webbook
ripol	1357.00		NIST Webbook
ripol	1367.00		NIST Webbook
ripol	1368.00		NIST Webbook
ripol	1369.00		NIST Webbook
ripol	1379.00		NIST Webbook
ripol	1380.00		NIST Webbook
ripol	1381.00		NIST Webbook
ripol	1382.00		NIST Webbook
ripol	1385.00		NIST Webbook
ripol	1374.00		NIST Webbook
ripol	1375.00		NIST Webbook
ripol	1376.00		NIST Webbook
ripol	1378.00		NIST Webbook
ripol	1379.00		NIST Webbook
ripol	1380.00		NIST Webbook
ripol	1357.00		NIST Webbook
ripol	1366.80		NIST Webbook
ripol	1358.80		NIST Webbook
ripol	1367.70		NIST Webbook
ripol	1351.60		NIST Webbook
ripol	1355.60		NIST Webbook
ripol	1365.40		NIST Webbook
ripol	1365.90		NIST Webbook
ripol	1352.80		NIST Webbook
ripol	1357.20		NIST Webbook
ripol	1385.00		NIST Webbook
tb	501.00	K	Joback Method
tc	667.97	K	Joback Method
tf	231.19	K	Joback Method
vc	0.744	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source

cpg	439.01	J/mol×K	501.00	Joback Method
cpg	456.28	J/mol×K	528.83	Joback Method
cpg	472.83	J/mol×K	556.66	Joback Method
cpg	488.69	J/mol×K	584.48	Joback Method
cpg	503.87	J/mol×K	612.31	Joback Method
cpg	518.42	J/mol×K	640.14	Joback Method
cpg	532.34	J/mol×K	667.97	Joback Method
dvisc	0.0056599	Pa×s	231.19	Joback Method
dvisc	0.0019529	Pa×s	276.16	Joback Method
dvisc	0.0009078	Pa×s	321.13	Joback Method
dvisc	0.0005093	Pa×s	366.10	Joback Method
dvisc	0.0003243	Pa×s	411.06	Joback Method
dvisc	0.0002257	Pa×s	456.03	Joback Method
dvisc	0.0001677	Pa×s	501.00	Joback Method

Sources

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

NIST Webbook: http://webbook.nist.gov/cgi/cbook.cgi?ID=C41446597&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

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