

5-Tridecene, (E)

Other names:	(5E)-5-Tridecene trans-5-Tridecene (E)-5-Tridecene
Inchi:	InChI=1S/C13H26/c1-3-5-7-9-11-13-12-10-8-6-4-2/h9,11H,3-8,10,12-13H2,1-2H3/b11-9+
InchiKey:	VDFGUEPMNNLWOZ-PKNCBQFBNSA-N
Formula:	C13H26
SMILES:	CCCCC=CCCCCCCC
Mol. weight [g/mol]:	182.35
CAS:	23051-84-5

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
ripol	1280.00		NIST Webbook
ripol	1286.00		NIST Webbook
ripol	1279.00		NIST Webbook
ripol	1280.00		NIST Webbook
ripol	1279.00		NIST Webbook
ripol	1281.00		NIST Webbook
ripol	1280.00		NIST Webbook
ripol	1280.00		NIST Webbook
ripol	1317.90		NIST Webbook
ripol	1321.40		NIST Webbook
ripol	1334.00		NIST Webbook
ripol	1322.30		NIST Webbook
ripol	1328.40		NIST Webbook
ripol	1333.00		NIST Webbook
ripol	1321.80		NIST Webbook
ripol	1318.60		NIST Webbook
ripol	1333.00		NIST Webbook

ripol	1336.00		NIST Webbook
ripol	1337.00		NIST Webbook
ripol	1338.00		NIST Webbook
ripol	1338.00		NIST Webbook
ripol	1332.00		NIST Webbook
ripol	1322.70		NIST Webbook
ripol	1332.00		NIST Webbook
ripol	1331.00		NIST Webbook
ripol	1338.00		NIST Webbook
ripol	1338.00		NIST Webbook
ripol	1337.00		NIST Webbook
ripol	1337.00		NIST Webbook
ripol	1328.00		NIST Webbook
ripol	1323.00		NIST Webbook
ripol	1328.00		NIST Webbook
ripol	1322.00		NIST Webbook
ripol	1329.00		NIST Webbook
ripol	1328.10		NIST Webbook
ripol	1336.00		NIST Webbook
tb	501.00	K	Joback Method
tc	667.97	K	Joback Method
tf	231.19	K	Joback Method
vc	0.744	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	439.01	J/molxK	501.00	Joback Method
cpg	518.42	J/molxK	640.14	Joback Method
cpg	503.87	J/molxK	612.31	Joback Method
cpg	488.69	J/molxK	584.48	Joback Method
cpg	472.83	J/molxK	556.66	Joback Method
cpg	456.28	J/molxK	528.83	Joback Method
cpg	532.34	J/molxK	667.97	Joback Method
dvisc	0.0001677	Paxs	501.00	Joback Method
dvisc	0.0002257	Paxs	456.03	Joback Method
dvisc	0.0003243	Paxs	411.06	Joback Method
dvisc	0.0005093	Paxs	366.10	Joback Method
dvisc	0.0009078	Paxs	321.13	Joback Method
dvisc	0.0019529	Paxs	276.16	Joback Method
dvisc	0.0056599	Paxs	231.19	Joback Method

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C23051845&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
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
ripol:	Polar retention indices
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume

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