cis-2-Methyl-7-octadecene

Other names:	Disparlure olefin
	(7Z)-2-Methyl-7-octadecene
	2-Methyl-7-octadecene, Z
	2-Methyl-(Z)-7-octadecene
	7-Octadecene, 2-methyl-, (7Z)-
Inchi:	InChI=1S/C19H38/c1-4-5-6-7-8-9-10-11-12-13-14-15-16-17-18-19(2)3/h13-14,19H,4-12,1
InchiKey:	XDBKLFODBADBED-YPKPFQOOSA-N
Formula:	C19H38
SMILES:	CCCCCCCCCCC=CCCCCC(C)C
Mol. weight [g/mol]:	266.50
CAS:	35354-39-3

Physical Properties

Property code	Value	Unit	Source
gf	186.88	kJ/mol	Joback Method
hf	-323.55	kJ/mol	Joback Method
hfus	41.65	kJ/mol	Joback Method
hvap	57.46	kJ/mol	Joback Method
log10ws	-7.39		Crippen Method
logp	7.290		Crippen Method
mcvol	274.270	ml/mol	McGowan Method
pc	1124.57	kPa	Joback Method
rinpol	1842.00		NIST Webbook
rinpol	1926.00		NIST Webbook
tb	637.84	K	Joback Method
tc	803.72	K	Joback Method
tf	283.81	K	Joback Method
vc	1.073	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	761.75	J/mol×K	637.84	Joback Method
cpg	782.18	J/mol×K	665.49	Joback Method

cpg	801.73	J/mol×K	693.13	Joback Method
cpg	820.43	J/mol×K	720.78	Joback Method
cpg	838.32	J/mol×K	748.43	Joback Method
cpg	855.44	J/mol×K	776.07	Joback Method
cpg	871.81	J/mol×K	803.72	Joback Method
dvisc	0.0054587	Pa×s	283.81	Joback Method
dvisc	0.0015150	Pa×s	342.81	Joback Method
dvisc	0.0006127	Pa×s	401.82	Joback Method
dvisc	0.0003124	Pa×s	460.82	Joback Method
dvisc	0.0001856	Pa×s	519.83	Joback Method
dvisc	0.0001226	Pa×s	578.84	Joback Method
dvisc	0.0000875	Pa×s	637.84	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=C35354393&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

tb: Normal Boiling Point Temperature

tc: Critical Temperature

tf: Normal melting (fusion) point

vc: Critical Volume