

2-Methyl-1-octadecene

Inchi:	InChI=1S/C19H38/c1-4-5-6-7-8-9-10-11-12-13-14-15-16-17-18-19(2)3/h2,4-18H2,1,3H3
InchiKey:	BRZBAFBEFONLMB-UHFFFAOYSA-N
Formula:	C19H38
SMILES:	C=C(C)CCCCCCCCCCCCCCC
Mol. weight [g/mol]:	266.50
CAS:	61868-20-0

Physical Properties

Property code	Value	Unit	Source
gf	188.39	kJ/mol	Joback Method
hf	-319.85	kJ/mol	Joback Method
hfus	42.38	kJ/mol	Joback Method
hvap	57.30	kJ/mol	Joback Method
log10ws	-7.63		Crippen Method
logp	7.434		Crippen Method
mcvol	274.270	ml/mol	McGowan Method
pc	1114.82	kPa	Joback Method
rinpol	1890.00		NIST Webbook
tb	630.68	K	Joback Method
tc	793.35	K	Joback Method
tf	288.17	K	Joback Method
vc	1.081	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	758.10	J/mol×K	630.68	Joback Method
cpg	778.35	J/mol×K	657.79	Joback Method
cpg	797.75	J/mol×K	684.90	Joback Method
cpg	816.34	J/mol×K	712.01	Joback Method
cpg	834.14	J/mol×K	739.12	Joback Method
cpg	851.18	J/mol×K	766.24	Joback Method
cpg	867.49	J/mol×K	793.35	Joback Method

Correlations

Information	Value
Property code	pvap
Equation	$\ln(P_{vp}) = A + B/(T + C)$
Coeff. A	1.54928e+01
Coeff. B	-5.39585e+03
Coeff. C	-9.66600e+01
Temperature range (K), min.	451.53
Temperature range (K), max.	626.64

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C61868200&Units=SI
The Yaws Handbook of Vapor Pressure:	https://www.sciencedirect.com/book/9780128029992/the-yaws-handbook-of-vapor-pressure
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

Legend

cpg:	Ideal gas heat capacity
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
pvap:	Vapor pressure
rinpol:	Non-polar retention indices
tb:	Normal Boiling Point Temperature

tc: Critical Temperature
tf: Normal melting (fusion) point
vc: Critical Volume

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