

3-methyl-1-nonene

Inchi:	InChI=1S/C10H20/c1-4-6-7-8-9-10(3)5-2/h5,10H,2,4,6-9H2,1,3H3
InchiKey:	XMORPFNWQFDQPS-UHFFFAOYSA-N
Formula:	C10H20
SMILES:	C=CC(C)CCCCC
Mol. weight [g/mol]:	140.27
CAS:	---

Physical Properties

Property code	Value	Unit	Source
gf	118.72	kJ/mol	Joback Method
hf	-129.58	kJ/mol	Joback Method
hfus	16.85	kJ/mol	Joback Method
hvap	36.80	kJ/mol	Joback Method
log10ws	-3.62		Crippen Method
logp	3.779		Crippen Method
mvol	147.460	ml/mol	McGowan Method
pc	2208.29	kPa	Joback Method
rinpol	944.00		NIST Webbook
tb	424.44	K	Joback Method
tc	593.69	K	Joback Method
tf	185.70	K	Joback Method
vc	0.571	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	299.11	J/molxK	424.44	Joback Method
cpg	368.39	J/molxK	565.48	Joback Method
cpg	355.67	J/molxK	537.27	Joback Method
cpg	342.39	J/molxK	509.07	Joback Method
cpg	328.55	J/molxK	480.86	Joback Method
cpg	314.13	J/molxK	452.65	Joback Method
cpg	380.58	J/molxK	593.69	Joback Method
dvisc	0.0002249	Paxs	424.44	Joback Method

dvisc	0.0003031	Paxs	384.65	Joback Method
dvisc	0.0004376	Paxs	344.86	Joback Method
dvisc	0.0006955	Paxs	305.07	Joback Method
dvisc	0.0012699	Paxs	265.28	Joback Method
dvisc	0.0028680	Paxs	225.49	Joback Method
dvisc	0.0091831	Paxs	185.70	Joback Method

Correlations

Information	Value
Property code	pvap
Equation	$\ln(P_{vp}) = A + B/(T + C)$
Coeff. A	1.57138e+01
Coeff. B	-4.16776e+03
Coeff. C	-6.43460e+01
Temperature range (K), min.	334.52
Temperature range (K), max.	465.00

Sources

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=R205979&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

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
pvap:	Vapor pressure
rinpola:	Non-polar retention indices
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume

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