

# 5-Methyl-4-octanol

Inchi:	InChI=1S/C9H20O/c1-4-6-8(3)9(10)7-5-2/h8-10H,4-7H2,1-3H3
InchiKey:	YLTHHPQUTLMNIF-UHFFFAOYSA-N
Formula:	C9H20O
SMILES:	CCCC(C)C(O)CCC
Mol. weight [g/mol]:	144.25
CAS:	59734-23-5

## Physical Properties

Property code	Value	Unit	Source
gf	-116.80	kJ/mol	Joback Method
hf	-391.88	kJ/mol	Joback Method
hfus	16.11	kJ/mol	Joback Method
hvap	51.53	kJ/mol	Joback Method
log10ws	-2.72		Crippen Method
logp	2.584		Crippen Method
mcvol	143.540	ml/mol	McGowan Method
pc	2566.29	kPa	Joback Method
tb	496.62	K	Joback Method
tc	661.81	K	Joback Method
tf	222.01	K	Joback Method
vc	0.546	m3/kmol	Joback Method

## Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	334.77	J/molxK	496.62	Joback Method
cpg	347.81	J/molxK	524.15	Joback Method
cpg	360.33	J/molxK	551.68	Joback Method
cpg	372.35	J/molxK	579.21	Joback Method
cpg	383.89	J/molxK	606.75	Joback Method
cpg	394.96	J/molxK	634.28	Joback Method
cpg	405.56	J/molxK	661.81	Joback Method
dvisc	0.2091511	Paxs	222.01	Joback Method
dvisc	0.0215322	Paxs	267.78	Joback Method

dvisc	0.0043049	Paxs	313.55	Joback Method
dvisc	0.0012970	Paxs	359.31	Joback Method
dvisc	0.0005125	Paxs	405.08	Joback Method
dvisc	0.0002445	Paxs	450.85	Joback Method
dvisc	0.0001337	Paxs	496.62	Joback Method

## Correlations

Information	Value
Property code	pvap
Equation	$\ln(P_{vp}) = A + B/(T + C)$
Coeff. A	1.52842e+01
Coeff. B	-4.24943e+03
Coeff. C	-6.76400e+01
Temperature range (K), min.	351.00
Temperature range (K), max.	493.75

## Sources

<b>Crippen Method:</b>	<a href="https://www.chemeo.com/doc/models/crippen_log10ws">https://www.chemeo.com/doc/models/crippen_log10ws</a>
<b>Joback Method:</b>	<a href="https://en.wikipedia.org/wiki/Joback_method">https://en.wikipedia.org/wiki/Joback_method</a>
<b>McGowan Method:</b>	<a href="http://link.springer.com/article/10.1007/BF02311772">http://link.springer.com/article/10.1007/BF02311772</a>
<b>NIST Webbook:</b>	<a href="http://webbook.nist.gov/cgi/cbook.cgi?ID=C59734235&amp;Units=SI">http://webbook.nist.gov/cgi/cbook.cgi?ID=C59734235&amp;Units=SI</a>
<b>The Yaws Handbook of Vapor Pressure:</b>	<a href="https://www.sciencedirect.com/book/9780128029992/the-yaws-handbook-of-vapor-pressure">https://www.sciencedirect.com/book/9780128029992/the-yaws-handbook-of-vapor-pressure</a>
<b>Crippen Method:</b>	<a href="http://pubs.acs.org/doi/abs/10.1021/ci9903071">http://pubs.acs.org/doi/abs/10.1021/ci9903071</a>

## Legend

<b>cpg:</b>	Ideal gas heat capacity
<b>dvisc:</b>	Dynamic viscosity
<b>gf:</b>	Standard Gibbs free energy of formation
<b>hf:</b>	Enthalpy of formation at standard conditions
<b>hfus:</b>	Enthalpy of fusion at standard conditions
<b>hvap:</b>	Enthalpy of vaporization at standard conditions
<b>log10ws:</b>	Log10 of Water solubility in mol/l

<b>logp:</b>	Octanol/Water partition coefficient
<b>mcvol:</b>	McGowan's characteristic volume
<b>pc:</b>	Critical Pressure
<b>pvap:</b>	Vapor pressure
<b>tb:</b>	Normal Boiling Point Temperature
<b>tc:</b>	Critical Temperature
<b>tf:</b>	Normal melting (fusion) point
<b>vc:</b>	Critical Volume

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