

# 1-Octanol, 3,7-dimethyl-, (R)-

<b>Inchi:</b>	InChI=1S/C10H22O/c1-9(2)5-4-6-10(3)7-8-11/h9-11H,4-8H2,1-3H3/t10-/m0/s1
<b>InchiKey:</b>	PRNCMAKCNVRZFX-JTQLQIEISA-N
<b>Formula:</b>	C10H22O
<b>SMILES:</b>	CC(C)CCCC(C)CCO
<b>Mol. weight [g/mol]:</b>	158.28
<b>CAS:</b>	1117-60-8

## Physical Properties

Property code	Value	Unit	Source
gf	-108.38	kJ/mol	Joback Method
hf	-412.52	kJ/mol	Joback Method
hfus	18.70	kJ/mol	Joback Method
hvap	53.76	kJ/mol	Joback Method
log10ws	-2.79		Crippen Method
logp	2.831		Crippen Method
mcvol	157.630	ml/mol	McGowan Method
pc	2333.78	kPa	Joback Method
tb	485.70	K	NIST Webbook
tc	683.75	K	Joback Method
tf	233.28	K	Joback Method
vc	0.603	m3/kmol	Joback Method

## Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	381.07	J/molxK	519.50	Joback Method
cpg	394.90	J/molxK	546.87	Joback Method
cpg	408.18	J/molxK	574.25	Joback Method
cpg	420.93	J/molxK	601.62	Joback Method
cpg	433.16	J/molxK	629.00	Joback Method
cpg	444.88	J/molxK	656.37	Joback Method
cpg	456.11	J/molxK	683.75	Joback Method
dvisc	0.1480969	Paxs	233.28	Joback Method
dvisc	0.0161218	Paxs	280.98	Joback Method

dvisc	0.0033408	Paxs	328.69	Joback Method
dvisc	0.0010317	Paxs	376.39	Joback Method
dvisc	0.0004150	Paxs	424.09	Joback Method
dvisc	0.0002007	Paxs	471.80	Joback Method
dvisc	0.0001109	Paxs	519.50	Joback Method

## Pressure Dependent Properties

Property code	Value	Unit	Pressure [kPa]	Source
tbrp	378.70	K	1.30	NIST Webbook

## Sources

<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=C1117608&amp;Units=SI">http://webbook.nist.gov/cgi/cbook.cgi?ID=C1117608&amp;Units=SI</a>
<b>Crippen Method:</b>	<a href="http://pubs.acs.org/doi/abs/10.1021/ci990307l">http://pubs.acs.org/doi/abs/10.1021/ci990307l</a>
<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>

## 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>tb:</b>	Normal Boiling Point Temperature
<b>tbrp:</b>	Boiling point at reduced pressure
<b>tc:</b>	Critical Temperature
<b>tf:</b>	Normal melting (fusion) point

**vc:** Critical Volume

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