

# 3,5-dimethyloctane, erythro

Inchi:	InChI=1S/C10H22/c1-5-7-10(4)8-9(3)6-2/h9-10H,5-8H2,1-4H3/t9-,10+/m1/s1
InchiKey:	VRHRGVJOUHJULC-ZJUUVORDSA-N
Formula:	C10H22
SMILES:	CCCC(C)CC(C)CC
Mol. weight [g/mol]:	142.28

## Physical Properties

Property code	Value	Unit	Source
gf	28.44	kJ/mol	Joback Method
hf	-260.29	kJ/mol	Joback Method
hfus	14.61	kJ/mol	Joback Method
hvap	37.08	kJ/mol	Joback Method
log10ws	-3.52		Crippen Method
logp	3.859		Crippen Method
mcvol	151.760	ml/mol	McGowan Method
pc	2139.38	kPa	Joback Method
rinpol	921.00		NIST Webbook
tb	427.32	K	Joback Method
tc	596.92	K	Joback Method
tf	172.46	K	Joback Method
vc	0.584	m <sup>3</sup> /kmol	Joback Method

## Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	315.26	J/molxK	427.32	Joback Method
cpg	388.93	J/molxK	568.65	Joback Method
cpg	375.35	J/molxK	540.39	Joback Method
cpg	361.21	J/molxK	512.12	Joback Method
cpg	346.50	J/molxK	483.85	Joback Method
cpg	331.18	J/molxK	455.59	Joback Method
cpg	401.95	J/molxK	596.92	Joback Method
dvisc	0.0002171	Paxs	427.32	Joback Method
dvisc	0.0003059	Paxs	384.84	Joback Method

dvisc	0.0004693	Paxs	342.37	Joback Method
dvisc	0.0008129	Paxs	299.89	Joback Method
dvisc	0.0016877	Paxs	257.41	Joback Method
dvisc	0.0046771	Paxs	214.94	Joback Method
dvisc	0.0214146	Paxs	172.46	Joback Method

## 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=R293446&amp;Units=SI">http://webbook.nist.gov/cgi/cbook.cgi?ID=R293446&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>

## 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>mccvol:</b>	McGowan's characteristic volume
<b>pc:</b>	Critical Pressure
<b>rinpol:</b>	Non-polar retention indices
<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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