

# Decane, 2,3,4-trimethyl-

<b>Other names:</b>	2,3,4-Trimethyl-decane
<b>Inchi:</b>	InChI=1S/C13H28/c1-6-7-8-9-10-12(4)13(5)11(2)3/h11-13H,6-10H2,1-5H3
<b>InchiKey:</b>	YFHGNGNLIWGTTR-UHFFFAOYSA-N
<b>Formula:</b>	C13H28
<b>SMILES:</b>	CCCCCCC(C)C(C)C(C)C
<b>Mol. weight [g/mol]:</b>	184.36
<b>CAS:</b>	62238-15-7

## Physical Properties

Property code	Value	Unit	Source
gf	51.26	kJ/mol	Joback Method
hf	-327.49	kJ/mol	Joback Method
hfus	18.86	kJ/mol	Joback Method
hvap	43.37	kJ/mol	Joback Method
log10ws	-4.54		Crippen Method
logp	4.885		Crippen Method
mcvol	194.030	ml/mol	McGowan Method
pc	1676.91	kPa	Joback Method
rinpol	1260.00		NIST Webbook
rinpol	1260.00		NIST Webbook
tb	495.52	K	Joback Method
tc	665.29	K	Joback Method
tf	191.27	K	Joback Method
vc	0.746	m3/kmol	Joback Method

## Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	455.81	J/molxK	495.52	Joback Method
cpg	541.98	J/molxK	636.99	Joback Method
cpg	526.17	J/molxK	608.70	Joback Method
cpg	509.67	J/molxK	580.40	Joback Method
cpg	492.46	J/molxK	552.11	Joback Method
cpg	474.51	J/molxK	523.81	Joback Method

cpg	557.11	J/molxK	665.29	Joback Method
dvisc	0.0001685	Paxs	495.52	Joback Method
dvisc	0.0002462	Paxs	444.81	Joback Method
dvisc	0.0003966	Paxs	394.10	Joback Method
dvisc	0.0007355	Paxs	343.39	Joback Method
dvisc	0.0016891	Paxs	292.69	Joback Method
dvisc	0.0054966	Paxs	241.98	Joback Method
dvisc	0.0334373	Paxs	191.27	Joback Method

## Sources

<b>NIST Webbook:</b>	<a href="http://webbook.nist.gov/cgi/cbook.cgi?ID=C62238157&amp;Units=SI">http://webbook.nist.gov/cgi/cbook.cgi?ID=C62238157&amp;Units=SI</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>
<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>

## 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>rinpola:</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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