

# Benzene, 1,2-diethyl-3,4-dimethyl-

<b>Inchi:</b>	InChI=1S/C12H18/c1-5-11-8-7-9(3)10(4)12(11)6-2/h7-8H,5-6H2,1-4H3
<b>InchiKey:</b>	FAWZMJHFENIDPI-UHFFFAOYSA-N
<b>Formula:</b>	C12H18
<b>SMILES:</b>	CCc1ccc(C)c(C)c1CC
<b>Mol. weight [g/mol]:</b>	162.27
<b>CAS:</b>	54410-75-2

## Physical Properties

Property code	Value	Unit	Source
gf	133.68	kJ/mol	Joback Method
hf	-88.89	kJ/mol	Joback Method
hfus	19.71	kJ/mol	Joback Method
hvap	46.57	kJ/mol	Joback Method
log10ws	-4.03		Crippen Method
logp	3.428		Crippen Method
mcvol	156.180	ml/mol	McGowan Method
pc	2302.53	kPa	Joback Method
tb	515.58	K	Joback Method
tc	718.31	K	Joback Method
tf	288.98	K	Joback Method
vc	0.600	m3/kmol	Joback Method

## Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	347.28	J/molxK	515.58	Joback Method
cpg	363.09	J/molxK	549.37	Joback Method
cpg	378.15	J/molxK	583.16	Joback Method
cpg	392.49	J/molxK	616.94	Joback Method
cpg	406.14	J/molxK	650.73	Joback Method
cpg	419.10	J/molxK	684.52	Joback Method
cpg	431.41	J/molxK	718.31	Joback Method
dvisc	0.0013949	Paxs	288.98	Joback Method
dvisc	0.0008227	Paxs	326.75	Joback Method

dvisc	0.0005414	Paxs	364.51	Joback Method
dvisc	0.0003853	Paxs	402.28	Joback Method
dvisc	0.0002908	Paxs	440.05	Joback Method
dvisc	0.0002294	Paxs	477.81	Joback Method
dvisc	0.0001874	Paxs	515.58	Joback Method

## Sources

<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=C54410752&amp;Units=SI">http://webbook.nist.gov/cgi/cbook.cgi?ID=C54410752&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>

## 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>tc:</b>	Critical Temperature
<b>tf:</b>	Normal melting (fusion) point
<b>vc:</b>	Critical Volume

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