

# 1-methyl,trans-3-ethylcycloheptane

Inchi:	InChI=1S/C10H20/c1-3-10-7-5-4-6-9(2)8-10/h9-10H,3-8H2,1-2H3
InchiKey:	ZNLKAJYDQSANTP-UHFFFAOYSA-N
Formula:	C10H20
SMILES:	CCC1CCCCC(C)C1
Mol. weight [g/mol]:	140.27

## Physical Properties

Property code	Value	Unit	Source
gf	37.96	kJ/mol	Joback Method
hf	-221.91	kJ/mol	Joback Method
hfus	12.46	kJ/mol	Joback Method
hvap	38.15	kJ/mol	Joback Method
log10ws	-3.42		Crippen Method
logp	3.613		Crippen Method
mcvol	140.900	ml/mol	McGowan Method
pc	2548.19	kPa	Joback Method
rinpol	904.10		NIST Webbook
rinpol	904.10		NIST Webbook
tb	447.35	K	Joback Method
tc	651.65	K	Joback Method
tf	202.08	K	Joback Method
vc	0.519	m <sup>3</sup> /kmol	Joback Method

## Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	299.55	J/molxK	447.35	Joback Method
cpg	320.47	J/molxK	481.40	Joback Method
cpg	340.43	J/molxK	515.45	Joback Method
cpg	359.45	J/molxK	549.50	Joback Method
cpg	377.53	J/molxK	583.55	Joback Method
cpg	394.70	J/molxK	617.60	Joback Method
cpg	410.96	J/molxK	651.65	Joback Method
dvisc	0.0087164	Paxs	202.08	Joback Method

dvisc	0.0028516	Paxs	242.96	Joback Method
dvisc	0.0012871	Paxs	283.84	Joback Method
dvisc	0.0007097	Paxs	324.72	Joback Method
dvisc	0.0004471	Paxs	365.59	Joback Method
dvisc	0.0003091	Paxs	406.47	Joback Method
dvisc	0.0002286	Paxs	447.35	Joback Method

## Sources

<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>
<b>NIST Webbook:</b>	<a href="http://webbook.nist.gov/cgi/cbook.cgi?ID=R238825&amp;Units=SI">http://webbook.nist.gov/cgi/cbook.cgi?ID=R238825&amp;Units=SI</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>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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