

# 3,7-Cyclodecadien-1-one, 3,7-dimethyl-10-(1-methylethylidene)-, (E,E)-

<b>Other names:</b>	Germacra-3,7(11),9-trien-6-one, (E,E)- Germacron Germacrone 3,7-Dimethyl-10-(1-methylethylidene)-3,7-cyclodecadien-1-one, (trans,trans)- (E,E)-Germacrone
<b>Inchi:</b>	InChI=1S/C15H22O/c1-11(2)14-9-8-12(3)6-5-7-13(4)10-15(14)16/h7-8H,5-6,9-10H2,1-4H
<b>InchiKey:</b>	CAULGCQHVOVVRN-SVGXSMIJSAN
<b>Formula:</b>	C15H22O
<b>SMILES:</b>	CC1=CCC(=C(C)C)C(=O)CC(C)=CCC1
<b>Mol. weight [g/mol]:</b>	218.33
<b>CAS:</b>	6902-91-6

## Physical Properties

Property code	Value	Unit	Source
gf	14.16	kJ/mol	Joback Method
hf	-281.75	kJ/mol	Joback Method
hfus	17.16	kJ/mol	Joback Method
hvap	57.43	kJ/mol	Joback Method
log10ws	-4.84		Crippen Method
logp	4.359		Crippen Method
mcvol	200.020	ml/mol	McGowan Method
pc	2049.31	kPa	Joback Method
rinpol	1669.00		NIST Webbook
rinpol	1696.00		NIST Webbook
rinpol	1693.00		NIST Webbook
rinpol	1689.00		NIST Webbook
rinpol	1693.00		NIST Webbook
rinpol	1707.90		NIST Webbook
rinpol	1694.00		NIST Webbook
rinpol	1677.00		NIST Webbook
rinpol	1733.00		NIST Webbook
rinpol	1690.00		NIST Webbook
rinpol	1705.00		NIST Webbook
rinpol	1675.00		NIST Webbook
rinpol	1658.00		NIST Webbook
rinpol	1691.00		NIST Webbook
rinpol	1690.00		NIST Webbook

rinpol	1694.00		NIST Webbook
rinpol	1693.00		NIST Webbook
rinpol	1694.00		NIST Webbook
rinpol	1694.00		NIST Webbook
rinpol	1687.00		NIST Webbook
rinpol	1694.00		NIST Webbook
rinpol	1644.00		NIST Webbook
rinpol	1705.00		NIST Webbook
rinpol	1688.00		NIST Webbook
rinpol	1691.30		NIST Webbook
ripol	2212.00		NIST Webbook
ripol	2217.00		NIST Webbook
ripol	2254.00		NIST Webbook
ripol	2223.00		NIST Webbook
ripol	2209.00		NIST Webbook
tb	666.52	K	Joback Method
tc	907.31	K	Joback Method
tf	347.53	K	Joback Method
vc	0.741	m <sup>3</sup> /kmol	Joback Method

## Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	539.74	J/mol×K	666.52	Joback Method
cpg	561.51	J/mol×K	706.65	Joback Method
cpg	581.83	J/mol×K	746.78	Joback Method
cpg	600.67	J/mol×K	786.92	Joback Method
cpg	618.01	J/mol×K	827.05	Joback Method
cpg	633.82	J/mol×K	867.18	Joback Method
cpg	648.08	J/mol×K	907.31	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=C6902916&amp;Units=SI">http://webbook.nist.gov/cgi/cbook.cgi?ID=C6902916&amp;Units=SI</a>

# Legend

<b>cpg:</b>	Ideal gas heat capacity
<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>ripol:</b>	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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