

Azulene, 1,2,3,3a,4,5,6,7-octahydro-1,4-dimethyl-7-(1-methyl- «gamma»-Gurjunene

Other names:

1«beta»,4«beta»,H-10«beta»,H-Guaia-5,11-diene
«gamma»-Gurjunene

[1R-(1«alpha»,3a«beta»,4«alpha»,7«beta»)]-1,2,3,3a,4,5,6,7-octahydro-7-isopropenyl-1

Inchi: InChI=1S/C15H24/c1-10(2)13-7-5-11(3)14-8-6-12(4)15(14)9-13/h9,11-14H,1,5-8H2,2-4H
InchiKey: DUYYRUYZIBGFLDD-UHFFFAOYSA-N
Formula: C15H24
SMILES: C=C(C)C1C=C2C(C)CCC2C(C)CC1
Mol. weight [g/mol]: 204.35
CAS: 22567-17-5

Physical Properties

Property code	Value	Unit	Source
gf	232.72	kJ/mol	Joback Method
hf	-110.70	kJ/mol	Joback Method
hfus	22.86	kJ/mol	Joback Method
hvap	49.24	kJ/mol	Joback Method
log10ws	-4.63		Crippen Method
logp	4.581		Crippen Method
mcvol	191.890	ml/mol	McGowan Method
pc	1896.95	kPa	Joback Method
rinpol	1475.00		NIST Webbook
rinpol	1472.00		NIST Webbook
rinpol	1463.00		NIST Webbook
rinpol	1459.00		NIST Webbook
rinpol	1475.00		NIST Webbook
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ripol	1676.00		NIST Webbook
ripol	1664.00		NIST Webbook
ripol	1700.00		NIST Webbook
ripol	1647.00		NIST Webbook
tb	564.52	K	Joback Method
tc	780.55	K	Joback Method
tf	269.69	K	Joback Method
vc	0.724	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	501.34	J/mol×K	564.52	Joback Method
cpg	525.40	J/mol×K	600.53	Joback Method
cpg	548.06	J/mol×K	636.53	Joback Method
cpg	569.37	J/mol×K	672.54	Joback Method
cpg	589.37	J/mol×K	708.54	Joback Method
cpg	608.13	J/mol×K	744.55	Joback Method
cpg	625.69	J/mol×K	780.55	Joback Method

Sources

Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws
Joback Method:	https://en.wikipedia.org/wiki/Joback_method
McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C22567175&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l

Legend

cpg:	Ideal gas heat capacity
gf:	Standard Gibbs free energy of formation
hf:	Enthalpy of formation at standard conditions
hfus:	Enthalpy of fusion at standard conditions
hvap:	Enthalpy of vaporization at standard conditions
log10ws:	Log10 of Water solubility in mol/l
logp:	Octanol/Water partition coefficient
mcvol:	McGowan's characteristic volume
pc:	Critical Pressure
rinpol:	Non-polar retention indices
ripol:	Polar retention indices
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume

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