4,10,10-trimethyl-7-methylenebicyclo[6.2.0]decane-4-carbaldehyde

Inchi: InChI=1S/C15H24O/c1-11-5-7-15(4,10-16)8-6-13-12(11)9-14(13,2)3/h10,12-13H,1,5-9H2

InchiKey: PGESEZMTIVWZDC-UHFFFAOYSA-N

Formula: C15H24O

SMILES: C=C1CCC(C)(C=O)CCC2C1CC2(C)C

Mol. weight [g/mol]: 220.35

Physical Properties

Property code	Value	Unit	Source
gf	75.68	kJ/mol	Joback Method
hf	-243.51	kJ/mol	Joback Method
hfus	13.15	kJ/mol	Joback Method
hvap	53.46	kJ/mol	Joback Method
log10ws	-4.06		Crippen Method
logp	3.984		Crippen Method
mcvol	197.760	ml/mol	McGowan Method
pc	2102.27	kPa	Joback Method
ripol	2004.00		NIST Webbook
ripol	2004.00		NIST Webbook
tb	612.12	K	Joback Method
tc	838.03	K	Joback Method
tf	375.61	K	Joback Method
vc	0.752	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	547.55	J/mol×K	612.12	Joback Method
cpg	569.44	J/mol×K	649.77	Joback Method
cpg	590.12	J/mol×K	687.42	Joback Method
cpg	609.81	J/mol×K	725.07	Joback Method
cpg	628.77	J/mol×K	762.73	Joback Method
cpg	647.23	J/mol×K	800.38	Joback Method
cpg	665.43	J/mol×K	838.03	Joback Method

Sources

Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l
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=R298812&Units=SI

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
ripol:	Polar retention indices
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume