2,2,9,9-Tetramethyldec-5-ene-3,7-diyne

Inchi: InChI=1S/C14H20/c1-13(2,3)11-9-7-8-10-12-14(4,5)6/h7-8H,1-6H3/b8-7+
InchiKey: UUSGALMHPVDLPR-BQYQJAHWSA-N
Formula: C14H20
SMILES: CC(C)(C)C#CC=CC#CC(C)(C)C
Mol. weight [g/mol]: 188.31
CAS: 102745-35-7

Physical Properties

Property code	Value	Unit	Source
gf	558.50	kJ/mol	Joback Method
hf	312.03	kJ/mol	Joback Method
hfus	23.63	kJ/mol	Joback Method
hvap	48.43	kJ/mol	Joback Method
log10ws	-4.64		Crippen Method
logp	3.642		Crippen Method
mcvol	186.620	ml/mol	McGowan Method
pc	2159.31	kPa	Joback Method
tb	535.42	K	Joback Method
tc	771.70	K	Joback Method
tf	459.50	K	Joback Method
vc	0.702	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	426.91	J/mol×K	535.42	Joback Method
cpg	446.54	J/mol×K	574.80	Joback Method
cpg	464.76	J/mol×K	614.18	Joback Method
cpg	481.68	J/mol×K	653.56	Joback Method
cpg	497.41	J/mol×K	692.94	Joback Method
cpg	512.05	J/mol×K	732.32	Joback Method
cpg	525.74	J/mol×K	771.70	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=C102745357&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
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume