2,2-Dimethyldeca-3,4-diene

Inchi: InChI=1S/C12H22/c1-5-6-7-8-9-10-11-12(2,3)4/h9,11H,5-8H2,1-4H3
InchiKey: RLYOJWAFNPKWRK-UHFFFAOYSA-N
Formula: C12H22
SMILES: CCCCCC=C=CC(C)(C)C
Mol. weight [g/mol]: 166.30
CAS: 121959-79-3

Physical Properties

Property code	Value	Unit	Source
gf	261.50	kJ/mol	Joback Method
hf	-19.76	kJ/mol	Joback Method
hfus	21.75	kJ/mol	Joback Method
hvap	41.40	kJ/mol	Joback Method
log10ws	-4.33		Crippen Method
logp	4.324		Crippen Method
mcvol	171.340	ml/mol	McGowan Method
pc	2053.03	kPa	Joback Method
tb	478.16	K	Joback Method
tc	666.58	K	Joback Method
tf	228.85	K	Joback Method
vc	0.656	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	380.17	J/mol×K	478.16	Joback Method
cpg	397.66	J/mol×K	509.56	Joback Method
cpg	414.28	J/mol×K	540.97	Joback Method
cpg	430.06	J/mol×K	572.37	Joback Method
cpg	445.05	J/mol×K	603.78	Joback Method
cpg	459.28	J/mol×K	635.18	Joback Method
cpg	472.77	J/mol×K	666.58	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=C121959793&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