2-Decene, 2,4-dimethyl-

Inchi: InChI=1S/C12H24/c1-5-6-7-8-9-12(4)10-11(2)3/h10,12H,5-9H2,1-4H3
InchiKey: FWXAUIPYMWHMSA-UHFFFAOYSA-N
Formula: C12H24
SMILES: CCCCCCC(C)C=C(C)C
Mol. weight [g/mol]: 168.32
CAS: 74421-03-7

Physical Properties

Property code	Value	Unit	Source
gf	119.39	kJ/mol	Joback Method
hf	-188.86	kJ/mol	Joback Method
hfus	22.21	kJ/mol	Joback Method
hvap	41.96	kJ/mol	Joback Method
log10ws	-4.46		Crippen Method
logp	4.559		Crippen Method
mcvol	175.640	ml/mol	McGowan Method
pc	1882.17	kPa	Joback Method
tb	477.56	K	Joback Method
tc	652.09	K	Joback Method
tf	190.96	K	Joback Method
vc	0.682	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	390.84	J/mol×K	477.56	Joback Method
cpg	408.11	J/mol×K	506.65	Joback Method
cpg	424.63	J/mol×K	535.74	Joback Method
cpg	440.42	J/mol×K	564.82	Joback Method
cpg	455.52	J/mol×K	593.91	Joback Method
cpg	469.94	J/mol×K	623.00	Joback Method
cpg	483.72	J/mol×K	652.09	Joback Method

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C74421037&Units=SI
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

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