tridecadiene-2,11

Inchi: InChI=1S/C13H24/c1-3-5-7-9-11-13-12-10-8-6-4-2/h3-6H,7-13H2,1-2H3
InchiKey: YUSQMQHVVVYZQX-UHFFFAOYSA-N
Formula: C13H24
SMILES: CC=CCCCCCCCC=CC
Mol. weight [g/mol]: 180.33

Physical Properties

Property code	Value	Unit	Source
gf	219.02	kJ/mol	Joback Method
hf	-77.21	kJ/mol	Joback Method
hfus	29.83	kJ/mol	Joback Method
hvap	44.45	kJ/mol	Joback Method
log10ws	-4.97		Crippen Method
logp	4.869		Crippen Method
mcvol	185.430	ml/mol	McGowan Method
pc	1792.42	kPa	Joback Method
rinpol	1300.00		NIST Webbook
rinpol	1300.00		NIST Webbook
ripol	1337.00		NIST Webbook
ripol	1337.00		NIST Webbook
tb	505.16	K	Joback Method
tc	679.26	K	Joback Method
tf	226.11	K	Joback Method
vc	0.724	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	422.28	J/mol×K	505.16	Joback Method
cpg	439.33	J/mol×K	534.18	Joback Method
cpg	455.58	J/mol×K	563.19	Joback Method
cpg	471.09	J/mol×K	592.21	Joback Method
cpg	485.87	J/mol×K	621.23	Joback Method
cpg	499.96	J/mol×K	650.24	Joback Method

cpg	513.41	J/mol×K	679.26	Joback Method
dvisc	0.0053549	Pa×s	226.11	Joback Method
dvisc	0.0017438	Pa×s	272.62	Joback Method
dvisc	0.0007875	Pa×s	319.13	Joback Method
dvisc	0.0004354	Pa×s	365.63	Joback Method
dvisc	0.0002751	Pa×s	412.14	Joback Method
dvisc	0.0001908	Pa×s	458.65	Joback Method
dvisc	0.0001416	Pa×s	505.16	Joback Method

Sources

McGowan Method: http://link.springer.com/article/10.1007/BF02311772
NIST Webbook: http://webbook.nist.gov/cgi/cbook.cgi?ID=R242616&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

Legend

cpg: Ideal gas heat capacity
dvisc: Dynamic viscosity
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