trans-1,2-Diethenyl-1,2-dimethylcyclobutane

Inchi: InChI=1S/C10H16/c1-5-9(3)7-8-10(9,4)6-2/h5-6H,1-2,7-8H2,3-4H3
InchiKey: ZASXJRHZTCKIAK-UHFFFAOYSA-N
Formula: C10H16
SMILES: C=CC1(C)CCC1(C)C=C
Mol. weight [g/mol]: 136.23
CAS: 19465-00-0

Physical Properties

Property code	Value	Unit	Source
gf	238.96	kJ/mol	Joback Method
hf	77.91	kJ/mol	Joback Method
hfus	3.61	kJ/mol	Joback Method
hvap	33.99	kJ/mol	Joback Method
log10ws	-3.13		Crippen Method
logp	3.165		Crippen Method
mcvol	132.300	ml/mol	McGowan Method
pc	2823.32	kPa	Joback Method
tb	428.38	K	Joback Method
tc	635.30	K	Joback Method
tf	256.92	K	Joback Method
vc	0.501	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	269.38	J/mol×K	428.38	Joback Method
cpg	287.24	J/mol×K	462.87	Joback Method
cpg	303.52	J/mol×K	497.35	Joback Method
cpg	318.40	J/mol×K	531.84	Joback Method
cpg	332.07	J/mol×K	566.32	Joback Method
cpg	344.74	J/mol×K	600.81	Joback Method
cpg	356.59	J/mol×K	635.30	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C19465000&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
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