«beta»-fenchene

Inchi: InChI=1S/C10H16/c1-9(2)7-10(3)5-4-8(9)6-10/h4-5,8H,6-7H2,1-3H3/t8-,10+/m1/s1
InchiKey: FUIDRYCKEXJNOK-SCZZXKLOSA-N
Formula: C10H16
SMILES: CC12C=CC(C1)C(C)(C)C2
Mol. weight [g/mol]: 136.23

Physical Properties

Property code	Value	Unit	Source
gf	153.99	kJ/mol	Joback Method
hf	-42.37	kJ/mol	Joback Method
hfus	5.52	kJ/mol	Joback Method
hvap	35.53	kJ/mol	Joback Method
log10ws	-2.93		Crippen Method
logp	2.999		Crippen Method
mcvol	125.740	ml/mol	McGowan Method
pc	3086.42	kPa	Joback Method
rinpol	948.00		NIST Webbook
rinpol	940.00		NIST Webbook
rinpol	921.00		NIST Webbook
rinpol	948.00		NIST Webbook
rinpol	940.00		NIST Webbook
rinpol	986.00		NIST Webbook
rinpol	949.10		NIST Webbook
rinpol	986.00		NIST Webbook
rinpol	955.60		NIST Webbook
rinpol	948.50		NIST Webbook
ripol	1075.00		NIST Webbook
ripol	1063.00		NIST Webbook
ripol	1070.00		NIST Webbook
ripol	1057.20		NIST Webbook
tb	440.92	K	Joback Method
tc	658.12	K	Joback Method
tf	279.14	K	Joback Method
vc	0.482	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	273.54	J/mol×K	440.92	Joback Method
cpg	292.70	J/mol×K	477.12	Joback Method
cpg	310.04	J/mol×K	513.32	Joback Method
cpg	325.79	J/mol×K	549.52	Joback Method
cpg	340.20	J/mol×K	585.72	Joback Method
cpg	353.50	J/mol×K	621.92	Joback Method
cpg	365.95	J/mol×K	658.12	Joback Method

Sources

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=R15838&Units=SI
Crippen Method: http://pubs.acs.org/doi/abs/10.1021/ci990307l

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
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