Bicyclo[2.2.1]heptane, 1,3,3-trimethyl-

Other names: Norbornane, 1,3,3-trimethyl-
«delta»-Fenchane
Fenchane
Inchi: InChI=1S/C10H18/c1-9(2)7-10(3)5-4-8(9)6-10/h8H,4-7H2,1-3H3
InchiKey: HINAOCRDJFBYGD-UHFFFAOYSA-N
Formula: C10H18
SMILES: CC12CCC(C1)C(C)(C)C2
Mol. weight [g/mol]: 138.25
CAS: 6248-88-0

Physical Properties

Property code	Value	Unit	Source
gf	124.03	kJ/mol	Joback Method
hf	-100.15	kJ/mol	Joback Method
hfus	4.30	kJ/mol	Joback Method
hvap	35.24	kJ/mol	Joback Method
log10ws	-3.07		Crippen Method
logp	3.223		Crippen Method
mcvol	130.040	ml/mol	McGowan Method
pc	2966.57	kPa	Joback Method
tb	437.00 ± 5.00	K	NIST Webbook
tc	656.69	K	Joback Method
tf	331.00 ± 4.00	K	NIST Webbook
vc	0.496	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	288.12	J/mol×K	441.76	Joback Method
cpg	308.54	J/mol×K	477.58	Joback Method
cpg	327.12	J/mol×K	513.40	Joback Method
cpg	344.11	J/mol×K	549.22	Joback Method
cpg	359.72	J/mol×K	585.04	Joback Method
cpg	374.21	J/mol×K	620.87	Joback Method

cpg	387.79	J/mol×K	656.69	Joback Method

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C6248880&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