(Z)-2-Pentene, 3,4,4-trimethyl

Inchi: InChI=1S/C10H20/c1-6-8-10(4,5)9(3)7-2/h7H,6,8H2,1-5H3/b9-7-
InchiKey: QNCYASFWLPOLRR-CLFYSBASSA-N
Formula: C10H20
SMILES: CC=C(C)C(C)(C)CCC
Mol. weight [g/mol]: 140.27

Physical Properties

Property code	Value	Unit	Source
gf	107.83	kJ/mol	Joback Method
hf	-151.05	kJ/mol	Joback Method
hfus	13.13	kJ/mol	Joback Method
hvap	36.60	kJ/mol	Joback Method
log10ws	-3.62		Crippen Method
logp	3.779		Crippen Method
mcvol	147.460	ml/mol	McGowan Method
pc	2263.26	kPa	Joback Method
rinpol	766.00		NIST Webbook
rinpol	766.00		NIST Webbook
tb	429.01	K	Joback Method
tc	613.55	K	Joback Method
tf	185.84	K	Joback Method
vc	0.566	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	302.06	J/mol×K	429.01	Joback Method
cpg	318.78	J/mol×K	459.77	Joback Method
cpg	334.63	J/mol×K	490.52	Joback Method
cpg	349.64	J/mol×K	521.28	Joback Method
cpg	363.86	J/mol×K	552.04	Joback Method
cpg	377.32	J/mol×K	582.79	Joback Method
cpg	390.07	J/mol×K	613.55	Joback Method

Sources

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
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=R568646&Units=SI

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
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume