Tetraisobutylene

Inchi: InChI=1S/4C4H8/c4*1-4(2)3/h4*1H2,2-3H3
InchiKey: PFCCSTRBUBCYSK-UHFFFAOYSA-N
Formula: C16H32
SMILES: C=C(C)C.C=C(C)C.C=C(C)C.C=C(C)C
Mol. weight [g/mol]: 224.43
CAS: 15220-85-6

Physical Properties

Property code	Value	Unit	Source
gf	86.72	kJ/mol	Joback Method
hf	-245.87	kJ/mol	Joback Method
hfus	16.74	kJ/mol	Joback Method
hvap	49.73	kJ/mol	Joback Method
log10ws	-6.25		Crippen Method
logp	6.330		Crippen Method
mcvol	251.680	ml/mol	McGowan Method
pc	1248.61	kPa	Joback Method
tb	555.92	K	Joback Method
tc	751.56	K	Joback Method
tf	108.98	K	Joback Method
vc	0.913	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	699.68	J/mol×K	718.95	Joback Method
cpg	582.50	J/mol×K	555.92	Joback Method
cpg	607.81	J/mol×K	588.53	Joback Method
cpg	632.26	J/mol×K	621.13	Joback Method
cpg	655.78	J/mol×K	653.74	Joback Method
cpg	678.28	J/mol×K	686.35	Joback Method
cpg	719.90	J/mol×K	751.56	Joback Method
hvapt	54.50	kJ/mol	410.50	NIST Webbook

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=C15220856&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
hvapt:	Enthalpy of vaporization at a given temperature
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