4-Nonene, 5-nitro-

Other names: 5-Nitro-4-nonene
Inchi: InChI=1S/C9H17NO2/c1-3-5-7-9(10(11)12)8-6-4-2/h7H,3-6,8H2,1-2H3/b9-7+
InchiKey: QTNRZJBKFAASKI-VQHVLOKHSA-N
Formula: C9H17NO2
SMILES: CCCC=C(CCCC)[N+](=O)[O-]
Mol. weight [g/mol]: 171.24
CAS: 6065-01-6

Physical Properties

Property code	Value	Unit	Source
gf	132.12	kJ/mol	Joback Method
hf	-132.42	kJ/mol	Joback Method
hfus	29.32	kJ/mol	Joback Method
hvap	52.26	kJ/mol	Joback Method
log10ws	-4.02		Crippen Method
logp	3.137		Crippen Method
mcvol	150.790	ml/mol	McGowan Method
pc	2467.81	kPa	Joback Method
tb	561.20	K	Joback Method
tc	766.84	K	Joback Method
tf	315.76	K	Joback Method
vc	0.603	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	365.87	J/mol×K	561.20	Joback Method
cpg	380.08	J/mol×K	595.47	Joback Method
cpg	393.50	J/mol×K	629.75	Joback Method
cpg	406.17	J/mol×K	664.02	Joback Method
cpg	418.13	J/mol×K	698.29	Joback Method
cpg	429.42	J/mol×K	732.57	Joback Method
cpg	440.09	J/mol×K	766.84	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=C6065016&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
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume