Benzene, 1,1'-(2-nitropropylidene)bis[4-chloro-

Other names:	Propane, 1,1-bis(p-chlorophenyl)-2-nitro-
	CS 645A
	DNP
	Prolan
	1,1-Bis(p-Chlorophenyl)-2-nitropropane
	2-Nitro-1,1-bis(p-chlorophenyl)propane
	1,1-Bis(4-chlorophenyl)-2-nitropropane
	ENT 22,784
	1,1'-(2-Nitropropylidene)bis(4-chlorobenzene)
	Prolan (insecticide)
	1,1-(Di-p-chlorophenyl)-2-nitropropane
Inchi:	InChI=1S/C15H13Cl2NO2/c1-10(18(19)20)15(11-2-6-13(16)7-3-11)12-4-8-14(17)9-5-12/
InchiKey:	JCWVUDIGEJLVPS-UHFFFAOYSA-N
Formula:	C15H13Cl2NO2
SMILES:	CC(C(c1ccc(Cl)cc1)c1ccc(Cl)cc1)[N+](=O)[O-]
Mol. weight [g/mol]:	310.18
CAS:	117-27-1

Physical Properties

Property code	Value	Unit	Source
gf	287.79	kJ/mol	Joback Method
hf	44.39	kJ/mol	Joback Method
hfus	34.62	kJ/mol	Joback Method
hvap	79.45	kJ/mol	Joback Method
log10ws	-5.94		Crippen Method
logp	4.790		Crippen Method
mcvol	216.590	ml/mol	McGowan Method
pc	2329.27	kPa	Joback Method
rinpol	2250.00		NIST Webbook
rinpol	2250.00		NIST Webbook
rinpol	2250.00		NIST Webbook
tb	831.74	K	Joback Method
tc	1101.27	K	Joback Method
tf	355.17 ± 0.20	K	NIST Webbook
vc	0.828	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	572.69	J/mol×K	831.74	Joback Method
cpg	585.30	J/mol×K	876.66	Joback Method
cpg	596.68	J/mol×K	921.58	Joback Method
cpg	606.93	J/mol×K	966.51	Joback Method
cpg	616.17	J/mol×K	1011.43	Joback Method
cpg	624.51	J/mol×K	1056.35	Joback Method
cpg	632.06	J/mol×K	1101.27	Joback Method
hfust	21.39	kJ/mol	354.30	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=C117271&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
hfust: Enthalpy of fusion at a given temperature
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