Lindane

Other names:

Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1«alpha»,2«alpha»,3«beta»,4«alpha»,5«alpha»,6«beta»)-
Cyclohexane, 1,2,3,4,5,6-hexachloro-, «gamma»-
«gamma»-Benzene hexachloride
«gamma»-BHC
«gamma»-Hexachloran
«gamma»-Hexachlorane
«gamma»-Hexachlorobenzene
«gamma»-Hexachlorocyclohexane
«gamma»-HCH
«gamma»-Lindane
«gamma»-1,2,3,4,5,6-Hexachlorocyclohexane
Aalindan
Aficide
Agrocide
Agrocide III
Agrocide WP
Ameisenmittel Merck
Ameisentod
Aparasin
Aphtiria
Aplidal
Arbitex
Ben-Hex
Bentox 10
Benzene hexachloride
Bexol
BBH
BHC
Celanex
Chloresene
Codechine
Detmol Extrakt
Devoran
Dol Granule
Drilltox-Spezial Aglukon
DBH
Entomoxan
ENT 7,796
Gamacid
Gammalin

Gammalin 20
Gammaterr
Gammexane
Gexane
Heclotox
Hexa
Hexachloran
Hexachlorane
Hexachlorocyclohexane
Hexatox
Hexaverm
Hexicide
Hexyclan
Hortex
HCCH
HCH
HGI
Isotox
Jacutin
Kokotine
Kwell
Lendine
Lentox
Lidenal
Lindatox
Lindex
Lindosep
Lintox
Linvur
Lorexane
Milbol 49
Mszycol
Neo-Scabicidol
Nexen FB
Nexit
Nexit Stark
Nexol E
Nicochloran
Omnitox
Ovadziak
Owadziak
Pedraczak
Pflanzol

	Quellada
	Sang-«gamma»
	Spritz-Rapidin
	Spruehpflanzol
	Streunex
	Tri-6
	TAP 85
	1,2,3,4,5,6-Hexachlorocyclohexane
	666
	1,2,3,4,5,6-«gamma»-Hexachlorocyclohexane
	1,2,3,4,5,6-Hexachlorocyclohexane («gamma»)
	Hexachlorocyclohexane,«gamma»-isomer
	g-1,2,3,4,5,6-Hexachlorocyclohexane
	Scabene
	Benzene Hexachloride, «gamma»
	Atlas steward
	Esoderm
	Gamene
	Gamma-Col
	Lindafor
	Murfume grain store smoke
	Viton
	BHC(«gamma»)
	Cyclohexane, 1,2,3,4,5,6-hexachloro-, «gamma»-isomer
	«gamma»-Benzohexachloride
	Benhexol
	Gamma-HCH
	Lasochron
	Kanodane
	Sang-gamma
	Scabecid
	Gamma benzene hexachloride
	Lindan
	«gamma»-HCH or «gamma»-BHC
Inchi:	InChI=1S/C6H6Cl6/c7-1-2(8)4(10)6(12)5(11)3(1)9/h1-6H/t1-,2-,3-,4+,5+,6+
InchiKey:	JLYXXMFPNIAWKQ-GNIYUCBRSA-N
Formula:	C6H6Cl6
SMILES:	ClC1C(Cl)C(Cl)C(Cl)C(Cl)C1Cl
Mol. weight [g/mol]:	290.83
CAS:	58-89-9

Physical Properties

Property code	Value	Unit	Source
chl	-2741.00 ± 21.00	kJ/mol	NIST Webbook
gf	-86.04	kJ/mol	Joback Method
hf	-308.99	kJ/mol	Joback Method
hfus	33.67	kJ/mol	Joback Method
hsub	90.80 ± 0.70	kJ/mol	NIST Webbook
hsub	92.40 ± 4.00	kJ/mol	NIST Webbook
hvap	54.14	kJ/mol	Joback Method
log10ws	-3.82		Crippen Method
logp	3.644		Crippen Method
mcvol	157.980	ml/mol	McGowan Method
pc	2561.10	kPa	Joback Method
rinpol	1756.00		NIST Webbook
rinpol	1703.00		NIST Webbook
rinpol	1751.00		NIST Webbook
rinpol	1732.00		NIST Webbook
rinpol	1735.00		NIST Webbook
rinpol	1728.00		NIST Webbook
rinpol	1757.00		NIST Webbook
rinpol	1709.00		NIST Webbook
rinpol	1711.00		NIST Webbook
rinpol	1711.00		NIST Webbook
rinpol	1713.00		NIST Webbook
rinpol	1709.00		NIST Webbook
rinpol	1711.00		NIST Webbook
rinpol	1711.00		NIST Webbook
rinpol	1713.00		NIST Webbook
rinpol	1724.20		NIST Webbook
rinpol	1722.59		NIST Webbook
rinpol	1728.47		NIST Webbook
rinpol	1733.90		NIST Webbook
rinpol	1735.15		NIST Webbook
rinpol	1779.00		NIST Webbook
rinpol	1735.83		NIST Webbook
rinpol	1732.00		NIST Webbook
rinpol	1744.00		NIST Webbook
rinpol	1788.00		NIST Webbook
rinpol	1775.00		NIST Webbook
rinpol	1720.00		NIST Webbook
rinpol	1779.00		NIST Webbook

rinpol	1775.00		NIST Webbook
rinpol	1779.00		NIST Webbook
rinpol	1704.00		NIST Webbook
rinpol	1745.00		NIST Webbook
rinpol	1757.00		NIST Webbook
rinpol	1704.00		NIST Webbook
rinpol	1745.00		NIST Webbook
rinpol	1715.00		NIST Webbook
rinpol	298.00		NIST Webbook
rinpol	1703.00		NIST Webbook
rinpol	1709.00		NIST Webbook
rinpol	1711.00		NIST Webbook
rinpol	1728.47		NIST Webbook
rinpol	1737.79		NIST Webbook
rinpol	1757.00		NIST Webbook
rinpol	1728.00		NIST Webbook
tb	557.46	K	Joback Method
tc	799.93	K	Joback Method
tf	388.90 ± 0.20	K	NIST Webbook
tf	387.17 ± 0.20	K	NIST Webbook
tf	386.38 ± 0.05	K	NIST Webbook
tf	430.00 ± 2.00	K	NIST Webbook
vc	0.594	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	366.85	J/mol×K	799.93	Joback Method
cpg	301.54	J/mol×K	557.46	Joback Method
cpg	314.57	J/mol×K	597.87	Joback Method
cpg	326.75	J/mol×K	638.28	Joback Method
cpg	338.08	J/mol×K	678.70	Joback Method
cpg	348.54	J/mol×K	719.11	Joback Method
cpg	358.13	J/mol×K	759.52	Joback Method
dvisc	0.0005577	Pa×s	557.46	Joback Method
dvisc	0.0015575	Pa×s	323.08	Joback Method
dvisc	0.0011967	Pa×s	362.14	Joback Method
dvisc	0.0009679	Pa×s	401.21	Joback Method
dvisc	0.0008129	Pa×s	440.27	Joback Method
dvisc	0.0007025	Pa×s	479.33	Joback Method
dvisc	0.0006205	Pa×s	518.40	Joback Method

hfust	25.93	kJ/mol	386.38	NIST Webbook
hsubt	115.50	kJ/mol	349.00	NIST Webbook
hsubt	97.70 ± 0.60	kJ/mol	309.00	NIST Webbook
hsubt	106.60 ± 0.90	kJ/mol	273.00	NIST Webbook
hsubt	90.10 ± 0.70	kJ/mol	338.00	NIST Webbook
hsubt	99.20	kJ/mol	338.00	NIST Webbook
hsubt	88.90	kJ/mol	303.00	NIST Webbook
hsubt	101.20	kJ/mol	303.00	NIST Webbook
hsubt	89.70	kJ/mol	328.00	NIST Webbook
hvapt	70.50	kJ/mol	398.00	NIST Webbook

Sources

NIST Webbook: http://webbook.nist.gov/cgi/cbook.cgi?ID=C58899&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

chl: Standard liquid enthalpy of combustion
cpg: Ideal gas heat capacity
dvisc: Dynamic viscosity
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
hsub: Enthalpy of sublimation at standard conditions
hsubt: Enthalpy of sublimation at a given temperature
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
rinpol: Non-polar retention indices
tb: Normal Boiling Point Temperature

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