Anthracene, 2-chloro-

Other names: 2-Chloroanthracene

«beta»-Chloro anthracene «beta»-Chloro anthracene

InChl=1S/C14H9Cl/c15-14-6-5-12-7-10-3-1-2-4-11(10)8-13(12)9-14/h1-9H

InchiKey: OWFINXQLBMJDJQ-UHFFFAOYSA-N

Formula: C14H9Cl

SMILES: Clc1ccc2cc3ccccc3cc2c1

Mol. weight [g/mol]: 212.67

CAS: 17135-78-3

Physical Properties

Property code	Value	Unit	Source
ea	0.80 ± 0.10	eV	NIST Webbook
gf	361.52	kJ/mol	Joback Method
hf	247.70	kJ/mol	Joback Method
hfus	23.51	kJ/mol	Joback Method
hvap	58.02	kJ/mol	Joback Method
log10ws	-5.77		Crippen Method
logp	4.646		Crippen Method
mcvol	157.680	ml/mol	McGowan Method
рс	3059.17	kPa	Joback Method
tb	631.75	K	Joback Method
tc	889.70	K	Joback Method
tf	394.32	K	Joback Method
VC	0.605	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	357.63	J/mol×K	631.75	Joback Method
cpg	370.92	J/mol×K	674.74	Joback Method
cpg	383.03	J/mol×K	717.73	Joback Method
cpg	394.12	J/mol×K	760.72	Joback Method
срд	404.32	J/mol×K	803.71	Joback Method

cpg 422.66 J/molxK 889.70 Joback dvisc 0.0014534 Paxs 394.32 Joback dvisc 0.0011176 Paxs 433.89 Joback dvisc 0.0008980 Paxs 473.46 Joback dvisc 0.0007463 Paxs 513.04 Joback dvisc 0.0006369 Paxs 552.61 Joback dvisc 0.0005552 Paxs 592.18 Joback dvisc 0.0004923 Paxs 631.75 Joback hsubt 99.30 ± 2.70 kJ/mol 351.00 NIST W psub 3.55e-04 kPa 370.40 The eff halo hetero-a the v pressur result result result Result Paxs 368.10 The eff halo hetero-a the v pressur psub 2.84e-04 kPa 367.20 The eff halo hetero-a the v pressur The eff halo hetero-a the v pressur psub 2.84e-04 kPa 367.20 The eff halo hetero-a the v pressur psub <th></th> <th></th> <th></th> <th></th> <th></th> <th></th>						
dvisc 0.0014534 Paxs 394.32 Joback dvisc 0.0011176 Paxs 433.89 Joback dvisc 0.0008980 Paxs 473.46 Joback dvisc 0.0007463 Paxs 513.04 Joback dvisc 0.0006369 Paxs 552.61 Joback dvisc 0.0004923 Paxs 631.75 Joback hsubt 99.30 ± 2.70 kJ/mol 351.00 NIST W psub 3.55e-04 kPa 370.40 The efhalo hetero-a the v pressure techn psub 3.14e-04 kPa 368.10 The efhalo hetero-a the v pressure techn psub 2.84e-04 kPa 367.20 The efhalo hetero-a the v pressure techn psub 2.84e-04 kPa 367.20 The efhalo hetero-a the v pressure techn psub 2.84e-04 kPa 367.20 The efhalo hetero-a the v pressure techn psub 4.00e-04 kPa 371.80 The efhalo hetero-a the v pressure techn	cpg	413.79	J/mol×K	846.71	Joback Method	
dvisc 0.0011176 Paxs 433.89 Joback dvisc 0.0008980 Paxs 473.46 Joback dvisc 0.0007463 Paxs 513.04 Joback dvisc 0.0006369 Paxs 552.61 Joback dvisc 0.0004923 Paxs 631.75 Joback hsubt 99.30 ± 2.70 kJ/mol 351.00 NIST W psub 3.55e-04 kPa 370.40 The eff halo hetero-a the v pressur hetero-a the v pressur hetero-a the v pressur the v pressur the v pressur hetero-a the v pressur psub 2.84e-04 kPa 367.20 The eff halo hetero-a the v pressur the v pressur the v pressur the v pressur thermody of poly aron aron compo aron aron compo psub 2.84e-04 kPa 367.20 The eff halo hetero-a the v pressur psub 4.00e-04 kPa 371.80 The eff halo	cpg	422.66	J/mol×K	889.70	Joback Method	
dvisc 0.0008980 Paxs 473.46 Joback dvisc 0.0007463 Paxs 513.04 Joback dvisc 0.0006369 Paxs 552.61 Joback dvisc 0.0004923 Paxs 592.18 Joback hsubt 99.30 ± 2.70 kJ/mol 351.00 NIST W psub 3.55e-04 kPa 370.40 The eff halo hetero-a the v pressur thermody of poly arom comported in the violent pressur thermody of poly arom comported in the violent pressur thermody of poly arom comported in the violent pressur thermody of poly arom comported in the violent pressur the pressure t	dvisc	0.0014534	Paxs	394.32	Joback Method	
Description	dvisc	0.0011176	Paxs	433.89	Joback Method	_
dvisc 0.0006369 Paxs 552.61 Joback dvisc 0.0005552 Paxs 592.18 Joback dvisc 0.0004923 Paxs 631.75 Joback hsubt 99.30 ± 2.70 kJ/mol 351.00 NIST W psub 3.55e-04 kPa 370.40 The ef halo hetero-a the v pressur thermody of poly aron comports are comports aron comports aron comports are comports aron comports aro	dvisc	0.0008980	Paxs	473.46	Joback Method	_
Description	dvisc	0.0007463	Paxs	513.04	Joback Method	_
Description	dvisc	0.0006369	Paxs	552.61	Joback Method	
hsubt 99.30 ± 2.70 kJ/mol 351.00 NIST W	dvisc	0.0005552	Paxs	592.18	Joback Method	
psub 3.55e-04 kPa 370.40 The eff halo hetero-a the v pressur thermody of poly arom comports the psub 3.14e-04 kPa 368.10 The eff halo hetero-a the v pressur thermody of poly arom comports the psub 2.84e-04 kPa 367.20 The eff halo hetero-a the v pressur thermody of poly arom comports the psub 2.84e-04 kPa 367.20 The eff halo hetero-a the v pressur thermody of poly arom comports the psub a	dvisc	0.0004923	Paxs	631.75	Joback Method	
halo hetero-a the v pressur thermody of poly arom comport measure Knudsen techn psub 3.14e-04 kPa 368.10 The ef halo hetero-a the v pressur thermody of poly arom comport measure Knudsen techn psub 2.84e-04 kPa 367.20 The ef halo hetero-a the v pressur thermody of poly arom comport measure Knudsen techn psub 4.00e-04 kPa 371.80 The ef halo halo hetero-a the v pressur thermody of poly arom comport measure Knudsen techn	hsubt	99.30 ± 2.70	kJ/mol	351.00	NIST Webbook	
halo hetero-a the v pressur thermody of poly arom composite the knudsen techn psub 2.84e-04 kPa 367.20 The eff halo hetero-a the v pressur thermody of poly arom composite the view pressur thermody of poly arom composite the knudsen techn psub 4.00e-04 kPa 371.80 The eff halo	psub	3.55e-04	kPa	370.40	The effect of halogen hetero-atoms on the vapor pressures and thermodynamics of polycyclic aromatic compounds measured via the Knudsen effusion technique	
halo hetero-a the v pressur thermody of poly arom compound measure Knudsen techn	psub	3.14e-04	kPa	368.10	The effect of halogen hetero-atoms on the vapor pressures and thermodynamics of polycyclic aromatic compounds measured via the Knudsen effusion technique	
halo	psub	2.84e-04	kPa	367.20	The effect of halogen hetero-atoms on the vapor pressures and thermodynamics of polycyclic aromatic compounds measured via the Knudsen effusion technique	
the v pressur thermody of poly arom compo measure Knudsen	psub	4.00e-04	kPa	371.80	The effect of halogen hetero-atoms on the vapor pressures and thermodynamics of polycyclic aromatic compounds measured via the Knudsen effusion technique	

psub	2.17e-04	kPa	363.90	The effect of halogen hetero-atoms on the vapor pressures and thermodynamics of polycyclic aromatic compounds measured via the Knudsen effusion technique	
psub	1.95e-04	kPa	363.00	The effect of halogen hetero-atoms on the vapor pressures and thermodynamics of polycyclic aromatic compounds measured via the Knudsen effusion technique	
psub	1.79e-04	kPa	361.40	The effect of halogen hetero-atoms on the vapor pressures and thermodynamics of polycyclic aromatic compounds measured via the Knudsen effusion technique	
psub	1.35e-04	kPa	358.90	The effect of halogen hetero-atoms on the vapor pressures and thermodynamics of polycyclic aromatic compounds measured via the Knudsen effusion technique	
psub	1.24e-04	kPa	358.20	The effect of halogen hetero-atoms on the vapor pressures and thermodynamics of polycyclic aromatic compounds measured via the Knudsen effusion technique	

nouh	1.00e-04	kPa	355.60	The effect of	
psub	1.00e-04	Krd	333.00	halogen hetero-atoms on the vapor pressures and thermodynamics of polycyclic aromatic compounds measured via the Knudsen effusion technique	
psub	1.03e-04	kPa	355.40	The effect of halogen hetero-atoms on the vapor pressures and thermodynamics of polycyclic aromatic compounds measured via the Knudsen effusion technique	
psub	8.76e-05	kPa	352.60	The effect of halogen hetero-atoms on the vapor pressures and thermodynamics of polycyclic aromatic compounds measured via the Knudsen effusion technique	
psub	7.29e-05	kPa	351.60	The effect of halogen hetero-atoms on the vapor pressures and thermodynamics of polycyclic aromatic compounds measured via the Knudsen effusion technique	
psub	5.71e-05	kPa	349.40	The effect of halogen hetero-atoms on the vapor pressures and thermodynamics of polycyclic aromatic compounds measured via the Knudsen effusion technique	

psub	2.70e-05	kPa	343.00	The effect of halogen hetero-atoms on the vapor pressures and thermodynamics of polycyclic aromatic compounds measured via the Knudsen effusion technique	
psub	2.40e-05	kPa	341.20	The effect of halogen hetero-atoms on the vapor pressures and thermodynamics of polycyclic aromatic compounds measured via the Knudsen effusion technique	
psub	2.08e-05	kPa	338.90	The effect of halogen hetero-atoms on the vapor pressures and thermodynamics of polycyclic aromatic compounds measured via the Knudsen effusion technique	
psub	9.70e-06	kPa	333.60	The effect of halogen hetero-atoms on the vapor pressures and thermodynamics of polycyclic aromatic compounds measured via the Knudsen effusion technique	
psub	8.30e-06	kPa	331.40	The effect of halogen hetero-atoms on the vapor pressures and thermodynamics of polycyclic aromatic compounds measured via the Knudsen effusion technique	

Sources

Crippen Method: https://www.chemeo.com/doc/models/crippen_log10ws

https://www.doi.org/10.1016/j.jct.2007.09.006 The effect of halogen hetero-atoms on

compounds measured via the Knudsen effusion technique:

the vapor pressures and the vapor pressures are the vapor pressures and the va

http://link.springer.com/article/10.1007/BF02311772

NIST Webbook: http://webbook.nist.gov/cgi/cbook.cgi?ID=C17135783&Units=SI

http://pubs.acs.org/doi/abs/10.1021/ci990307l **Crippen Method:**

Legend

Ideal gas heat capacity cpg:

dvisc: Dynamic viscosity Electron affinity ea:

gf: Standard Gibbs free energy of formation

Enthalpy of formation at standard conditions hf: hfus: Enthalpy of fusion at standard conditions

hsubt: Enthalpy of sublimation at a given temperature

hvap: Enthalpy of vaporization at standard conditions

log10ws: Log10 of Water solubility in mol/l Octanol/Water partition coefficient logp: mcvol: McGowan's characteristic volume

Critical Pressure pc:

psub: Sublimation pressure

Normal Boiling Point Temperature tb:

tc: Critical Temperature

tf: Normal melting (fusion) point

Critical Volume vc:

Latest version available from:

https://www.chemeo.com/cid/32-268-9/Anthracene-2-chloro.pdf

Generated by Cheméo on 2025-12-05 16:54:45.700527914 +0000 UTC m=+4701883.230568567.

Cheméo (https://www.chemeo.com) is the biggest free database of chemical and physical data for the process industry.