

Benzene, 4-chloro-2-(chloromethyl)-1-methyl

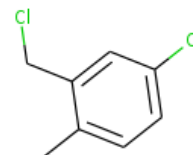
InChI: InChI=1S/C8H8Cl2/c1-6-2-3-8(10)4-7(6)5-9/h2-4H,5H2,1H3

InChI Key: JMGAFTBKTDKOHT-UHFFFAOYSA-N

Formula: C₈H₈Cl₂

SMILES: Cc1ccc(Cl)cc1CCl

Molecular Weight: 175.05



Physical Properties

Property	Value	Unit	Source
$\Delta_f G^\circ$	85.77	kJ/mol	Joback Method
$\Delta_f H^\circ_{\text{gas}}$	-26.34	kJ/mol	Joback Method
$\Delta_{\text{fus}} H^\circ$	18.13	kJ/mol	Joback Method
$\Delta_{\text{vap}} H^\circ$	45.77	kJ/mol	Joback Method
$\log P_{\text{oct/wat}}$	3.39		Crippen Method
P_c	3231.98	kPa	Joback Method
T_{boil}	493.94	K	Joback Method
T_c	719.52	K	Joback Method
T_{fus}	291.22	K	Joback Method
V_c	0.47	m ³ /kg-mol	Joback Method

Temperature Dependent Properties

Property	Value	Unit	Temperature (K)	Source
$C_{p,\text{gas}}$	226.48	J/mol×K	493.94	Joback Method
η	0.00	Paxs	493.94	Joback Method

Sources

Joback Method: https://en.wikipedia.org/wiki/Joback_method

NIST Webbook:

[http://webbook.nist.gov/cgi/inchi/InChI=1S/C8H8Cl2/c1-6-2-3-8\(10\)4-7\(6\)5-9/h2-4H,5H2,1H3](http://webbook.nist.gov/cgi/inchi/InChI=1S/C8H8Cl2/c1-6-2-3-8(10)4-7(6)5-9/h2-4H,5H2,1H3)

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

Legend

$C_{p, gas}$: Ideal gas heat capacity (J/molxK).

η : Dynamic viscosity (Paxs).

$\Delta_f G^\circ$: Standard Gibbs free energy of formation (kJ/mol).

$\Delta_f H^\circ_{gas}$: Enthalpy of formation at standard conditions (kJ/mol).

$\Delta_{fus} H^\circ$: Enthalpy of fusion at standard conditions (kJ/mol).

$\Delta_{vap} H^\circ$: Enthalpy of vaporization at standard conditions (kJ/mol).

$logP_{oct/wat}$: Octanol/Water partition coefficient .

P_c : Critical Pressure (kPa).

T_{boil} : Normal Boiling Point Temperature (K).

T_c : Critical Temperature (K).

T_{fus} : Normal melting (fusion) point (K).

V_c : Critical Volume (m³/kg-mol).

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