

1,2,4-Trimethyl-3-(chloromethyl)benzene

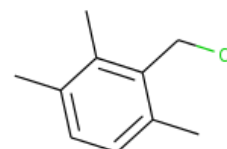
InChI: InChI=1S/C10H13Cl/c1-7-4-5-8(2)10(6-11)9(7)3/h4-5H,6H2,1-3H3

InChI Key: HGFIBEDXILACRG-UHFFFAOYSA-N

Formula: C₁₀H₁₃Cl

SMILES: Cc1ccc(C)c(CCl)c1C

Molecular Weight: 168.66



Physical Properties

Property	Value	Unit	Source
$\Delta_f G^\circ$	104.91	kJ/mol	Joback Method
$\Delta_f H^\circ_{\text{gas}}$	-63.35	kJ/mol	Joback Method
$\Delta_{\text{fus}} H^\circ$	18.73	kJ/mol	Joback Method
$\Delta_{\text{vap}} H^\circ$	46.50	kJ/mol	Joback Method
$\log P_{\text{oct/wat}}$	3.35		Crippen Method
P_c	2687.42	kPa	Joback Method
T_{boil}	507.25	K	Joback Method
T_c	721.45	K	Joback Method
T_{fus}	296.36	K	Joback Method
V_c	0.54	m ³ /kg-mol	Joback Method

Temperature Dependent Properties

Property	Value	Unit	Temperature (K)	Source
$C_{p,\text{gas}}$	285.86	J/mol×K	507.25	Joback Method
η	0.00	Paxs	507.25	Joback Method

Sources

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

NIST Webbook:

[http://webbook.nist.gov/cgi/inchi/InChI=1S/C10H13Cl/c1-7-4-5-8\(2\)10\(6-11\)9\(7\)3/h4-5H,6H2,1-3H3](http://webbook.nist.gov/cgi/inchi/InChI=1S/C10H13Cl/c1-7-4-5-8(2)10(6-11)9(7)3/h4-5H,6H2,1-3H3)

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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