

# Dimethylmalonic acid, propyl 2,3,5-trichlorophenyl ester

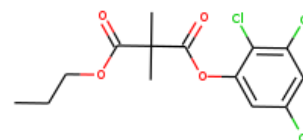
**InChI:** InChI=1S/C14H15Cl3O4/c1-4-5-20-12(18)14(2,3)13(19)21-10-7-8(15)6-9(16)11(10)17/h6-7H,4-5H2,1-3H3

**InChI Key:** PEGMVXZLURBLDL-UHFFFAOYSA-N

**Formula:** C14H15Cl3O4

**SMILES:** CCCOC(=O)C(C)(C)C(=O)Oc1cc(Cl)cc(Cl)c1Cl

**Molecular Weight:** 353.62



## Physical Properties

| Property                        | Value   | Unit                   | Source         |
|---------------------------------|---------|------------------------|----------------|
| $\Delta_f G^\circ$              | -350.27 | kJ/mol                 | Joback Method  |
| $\Delta_f H^\circ_{\text{gas}}$ | -675.74 | kJ/mol                 | Joback Method  |
| $\Delta_{\text{fus}} H^\circ$   | 35.64   | kJ/mol                 | Joback Method  |
| $\Delta_{\text{vap}} H^\circ$   | 81.19   | kJ/mol                 | Joback Method  |
| $\log P_{\text{oct/wat}}$       | 4.53    |                        | Crippen Method |
| $P_c$                           | 1930.44 | kPa                    | Joback Method  |
| $T_{\text{boil}}$               | 822.98  | K                      | Joback Method  |
| $T_c$                           | 1049.66 | K                      | Joback Method  |
| $T_{\text{fus}}$                | 548.02  | K                      | Joback Method  |
| $V_c$                           | 0.90    | m <sup>3</sup> /kg-mol | Joback Method  |

## Temperature Dependent Properties

| Property           | Value  | Unit    | Temperature (K) | Source        |
|--------------------|--------|---------|-----------------|---------------|
| $C_{p,\text{gas}}$ | 611.60 | J/mol×K | 822.98          | Joback Method |
| $\eta$             | 0.00   | Paxs    | 822.98          | Joback Method |

## Sources

**Joback Method:** [https://en.wikipedia.org/wiki/Joback\\_method](https://en.wikipedia.org/wiki/Joback_method)

**NIST Webbook:** [http://webbook.nist.gov/cgi/inchi/InChI=1S/C14H15Cl3O4/c1-4-5-20-12\(18\)14\(2,3\)13\(19\)21-10-7-8\(15\)6-9\(16\)11\(10\)17/h6-7H,4-5H2,1-3H3](http://webbook.nist.gov/cgi/inchi/InChI=1S/C14H15Cl3O4/c1-4-5-20-12(18)14(2,3)13(19)21-10-7-8(15)6-9(16)11(10)17/h6-7H,4-5H2,1-3H3)

**Crippen Method:** <http://pubs.acs.org/doi/abs/10.1021/ci9903071>

## Legend

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

$\eta$ : Dynamic viscosity (Pa $\times$ s).

$\Delta_f G^\circ$ : 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 (m<sup>3</sup>/kg-mol).

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