

# Terephthalic acid, but-3-enyl propyl ester

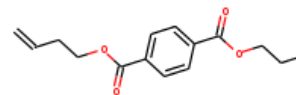
**InChI:** InChI=1S/C15H18O4/c1-3-5-11-19-15(17)13-8-6-12(7-9-13)14(16)18-10-4-2/h3,6-9H,1,4-5,10-11H2,2H3

**InChI Key:** CKYKRJSNKQFRSU-UHFFFAOYSA-N

**Formula:** C15H18O4

**SMILES:** C=CCCOC(=O)c1ccc(C(=O)OCCC)cc1

**Molecular Weight:** 262.30



## Physical Properties

Property	Value	Unit	Source
$\Delta_f G^\circ$	-201.80	kJ/mol	Joback Method
$\Delta_f H^\circ_{\text{gas}}$	-492.04	kJ/mol	Joback Method
$\Delta_{\text{fus}} H^\circ$	32.55	kJ/mol	Joback Method
$\Delta_{\text{vap}} H^\circ$	69.56	kJ/mol	Joback Method
$\log P_{\text{oct/wat}}$	2.99		Crippen Method
$P_c$	2051.17	kPa	Joback Method
$T_{\text{boil}}$	723.52	K	Joback Method
$T_c$	930.26	K	Joback Method
$T_{\text{fus}}$	440.31	K	Joback Method
$V_c$	0.80	m <sup>3</sup> /kg-mol	Joback Method

## Temperature Dependent Properties

Property	Value	Unit	Temperature (K)	Source
$C_{p,\text{gas}}$	569.26	J/mol×K	723.52	Joback Method
$\eta$	0.00	Paxs	723.52	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/C15H18O4/c1-3-5-11-19-15\(17\)13-8-6-12\(7-9-13\)14\(16\)18-10-4-2/h3,6-9H,1,4-5,10-11H2,2H3](http://webbook.nist.gov/cgi/inchi/InChI=1S/C15H18O4/c1-3-5-11-19-15(17)13-8-6-12(7-9-13)14(16)18-10-4-2/h3,6-9H,1,4-5,10-11H2,2H3)

**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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