

# 1,3-Butanediol, dibenzoate

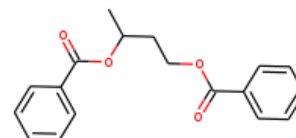
**InChI:** InChI=1S/C18H18O4/c1-14(22-18(20)16-10-6-3-7-11-16)12-13-21-17(19)15-8-4-2-5-9-15/h2-11,14H,12-13H2,1H3

**InChI Key:** HVWZDMVPWXVEBP-UHFFFAOYSA-N

**Formula:** C18H18O4

**SMILES:** CC(CCOC(=O)c1ccccc1)OC(=O)c1ccccc1

**Molecular Weight:** 298.33



## Physical Properties

Property	Value	Unit	Source
$\Delta_f G^\circ$	-144.78	kJ/mol	Joback Method
$\Delta_f H^\circ_{\text{gas}}$	-436.67	kJ/mol	Joback Method
$\Delta_{\text{fus}} H^\circ$	32.51	kJ/mol	Joback Method
$\Delta_{\text{vap}} H^\circ$	78.14	kJ/mol	Joback Method
$\log P_{\text{oct/wat}}$	3.48		Crippen Method
$P_c$	2096.50	kPa	Joback Method
$T_{\text{boil}}$	816.74	K	Joback Method
$T_c$	1048.22	K	Joback Method
$T_{\text{fus}}$	474.78	K	Joback Method
$V_c$	0.87	m <sup>3</sup> /kg-mol	Joback Method

## Temperature Dependent Properties

Property	Value	Unit	Temperature (K)	Source
$C_{p,\text{gas}}$	669.97	J/mol×K	816.74	Joback Method
$\eta$	0.00	Paxs	816.74	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/C18H18O4/c1-14\(22-18\(20\)16-10-6-3-7-11-16\)12-13-21-17\(19\)15-8-4-2-5-9-15/h2-11,14H,12-13H2,1H3](http://webbook.nist.gov/cgi/inchi/InChI=1S/C18H18O4/c1-14(22-18(20)16-10-6-3-7-11-16)12-13-21-17(19)15-8-4-2-5-9-15/h2-11,14H,12-13H2,1H3)

**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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