

# Glutaric acid, butyl 2,5-difluorobenzyl ester

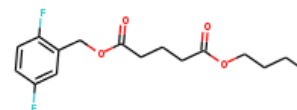
**InChI:** InChI=1S/C16H20F2O4/c1-2-3-9-21-15(19)5-4-6-16(20)22-11-12-10-13(17)7-8-14(12)18/h7-8,10H,2-6,9,11H2,1H3

**InChI Key:** VJOZFPPDQXOBLU-UHFFFAOYSA-N

**Formula:** C16H20F2O4

**SMILES:** CCCCOC(=O)CCCC(=O)OCc1cc(F)ccc1F

**Molecular Weight:** 314.32



## Physical Properties

Property	Value	Unit	Source
$\Delta_f G^\circ$	-680.47	kJ/mol	Joback Method
$\Delta_f H^\circ_{\text{gas}}$	-1041.80	kJ/mol	Joback Method
$\Delta_{\text{fus}} H^\circ$	42.19	kJ/mol	Joback Method
$\Delta_{\text{vap}} H^\circ$	71.49	kJ/mol	Joback Method
$\log P_{\text{oct/wat}}$	3.52		Crippen Method
$P_c$	1664.61	kPa	Joback Method
$T_{\text{boil}}$	753.24	K	Joback Method
$T_c$	943.80	K	Joback Method
$T_{\text{fus}}$	467.04	K	Joback Method
$V_c$	0.91	m <sup>3</sup> /kg-mol	Joback Method

## Temperature Dependent Properties

Property	Value	Unit	Temperature (K)	Source
$C_{p,\text{gas}}$	663.08	J/mol×K	753.24	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/C16H20F2O4/c1-2-3-9-21-15\(19\)5-4-6-16\(20\)22-11-12-10-13\(17\)7-8-14\(12\)18/h7-8,10H,2-6,9,11H2,1H3](http://webbook.nist.gov/cgi/inchi/InChI=1S/C16H20F2O4/c1-2-3-9-21-15(19)5-4-6-16(20)22-11-12-10-13(17)7-8-14(12)18/h7-8,10H,2-6,9,11H2,1H3)

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

## Legend

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

$\Delta_f G^\circ$ : 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).

$\log P_{oct/wat}$ : 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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