# Glutaric acid, di(1-(2,6-difluorophenyl)ethyl) ester

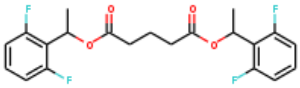
**InChI**: InChI=1S/C21H20F4O4/c1-12(20-14(22)6-3-7-15(20)23)28-18(26)10-5-11-19(27)29-13(2)21-16(24)8-4-9-17(21)25/h3-4,6-9,12-13H,5,10-11H2,1-2H3

**InChI Key**: CHIFOAZRJHRVLT-UHFFFAOYSA-N

**Formula**: C21H20F4O4

**SMILES**: CC(OC(=O)CCCC(=O)OC(C)c1c(F)cccc1F)c1c(F)cccc1F

**Molecular Weight**: 412.37



## Physical Properties

| Property | Value | Unit | Source |
|---|---|---|---|
| $\Delta_f G°$ | -939.72 | kJ/mol | Joback Method |
| $\Delta_f H°_{gas}$ | -1334.19 | kJ/mol | Joback Method |
| $\Delta_{fus} H°$ | 47.52 | kJ/mol | Joback Method |
| $\Delta_{vap} H°$ | 83.81 | kJ/mol | Joback Method |
| $logP_{oct/wat}$ | 5.32 | | Crippen Method |
| $P_c$ | 1367.69 | kPa | Joback Method |
| $T_{boil}$ | 901.94 | K | Joback Method |
| $T_c$ | 1112.05 | K | Joback Method |
| $T_{fus}$ | 546.03 | K | Joback Method |
| $V_c$ | 1.10 | $m^3$/kg-mol | Joback Method |

## Temperature Dependent Properties

| Property | Value | Unit | Temperature (K) | Source |
|---|---|---|---|---|
| $C_{p,gas}$ | 865.81 | J/mol×K | 901.94 | Joback Method |

## Sources

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

**NIST Webbook**: http://webbook.nist.gov/cgi/inchi/InChI=1S/C21H20F4O4/c1-12(20-14(22)6-3-7-15(20)23)28-18(26)10-5-11-19(27)29-13(2)21-16(24)8-4-9-17(21)25/h3-4,6-9,12-13H,5,10-11H2,1-2H3

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

## Legend

$C_{p,gas}$: Ideal gas heat capacity (J/mol×K).
$\Delta_f G°$: Standard Gibbs free energy of formation (kJ/mol).
$\Delta_f H°_{gas}$: Enthalpy of formation at standard conditions (kJ/mol).
$\Delta_{fus} H°$: Enthalpy of fusion at standard conditions (kJ/mol).
$\Delta_{vap} H°$: 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 ($m^3$/kg-mol).