

2-Fluorobenzoic acid, pent-2-en-4-ynyl ester

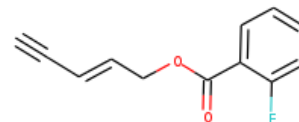
InChI: InChI=1S/C12H9FO2/c1-2-3-6-9-15-12(14)10-7-4-5-8-11(10)13/h1,3-8H,9H2

InChI Key: WXLWTLPDTMCDCC-UHFFFAOYSA-N

Formula: C₁₂H₉FO₂

SMILES: C#CC=CCOC(=O)c1ccccc1F

Molecular Weight: 204.20



Physical Properties

Property	Value	Unit	Source
$\Delta_f G^\circ$	27.50	kJ/mol	Joback Method
$\Delta_f H^\circ_{\text{gas}}$	-97.74	kJ/mol	Joback Method
$\Delta_{\text{fus}} H^\circ$	29.53	kJ/mol	Joback Method
$\Delta_{\text{vap}} H^\circ$	53.40	kJ/mol	Joback Method
$\log P_{\text{oct/wat}}$	2.17		Crippen Method
P_c	2912.39	kPa	Joback Method
T_{boil}	575.46	K	Joback Method
T_c	795.61	K	Joback Method
T_{fus}	378.58	K	Joback Method
V_c	0.58	m ³ /kg-mol	Joback Method

Temperature Dependent Properties

Property	Value	Unit	Temperature (K)	Source
$C_{p,\text{gas}}$	342.59	J/mol×K	575.46	Joback Method

Sources

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

NIST Webbook: [http://webbook.nist.gov/cgi/inchi/InChI=1S/C12H9FO2/c1-2-3-6-9-15-12\(14\)10-7-4-5-8-11\(10\)13/h1,3-8H,9H2](http://webbook.nist.gov/cgi/inchi/InChI=1S/C12H9FO2/c1-2-3-6-9-15-12(14)10-7-4-5-8-11(10)13/h1,3-8H,9H2)

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

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).

$logP_{oct/wat}$: 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 (m³/kg-mol).

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