

# Fumaric acid, monoamide, N-benzyl-N-phenethyl-, isopropyl ester

**Inchi:** InChI=1S/C22H25NO3/c1-18(2)26-22(25)14-13-21(24)23(17-20-11-7-4-8-12-20)16-15-19  
**InchiKey:** XXPGSJYLWLFBSBH-BUHFOSPRSA-N  
**Formula:** C22H25NO3  
**SMILES:** CC(C)OC(=O)C=CC(=O)N(CCc1ccccc1)Cc1ccccc1  
**Mol. weight [g/mol]:** 351.44

## Physical Properties

Property code	Value	Unit	Source
gf	184.90	kJ/mol	Joback Method
hf	-202.26	kJ/mol	Joback Method
hfus	44.90	kJ/mol	Joback Method
hvap	86.63	kJ/mol	Joback Method
log10ws	-4.91		Crippen Method
logp	3.766		Crippen Method
mcvol	288.010	ml/mol	McGowan Method
pc	1598.72	kPa	Joback Method
rinpol	2831.00		NIST Webbook
rinpol	2831.00		NIST Webbook
tb	902.44	K	Joback Method
tc	1130.09	K	Joback Method
tf	525.02	K	Joback Method
vc	1.073	m <sup>3</sup> /kmol	Joback Method

## Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	885.77	J/mol×K	902.44	Joback Method
cpg	900.68	J/mol×K	940.38	Joback Method
cpg	914.43	J/mol×K	978.32	Joback Method
cpg	927.12	J/mol×K	1016.27	Joback Method
cpg	938.86	J/mol×K	1054.21	Joback Method
cpg	949.74	J/mol×K	1092.15	Joback Method
cpg	959.87	J/mol×K	1130.09	Joback Method

# Sources

<b>McGowan Method:</b>	<a href="http://link.springer.com/article/10.1007/BF02311772">http://link.springer.com/article/10.1007/BF02311772</a>
<b>NIST Webbook:</b>	<a href="http://webbook.nist.gov/cgi/cbook.cgi?ID=U357528&amp;Units=SI">http://webbook.nist.gov/cgi/cbook.cgi?ID=U357528&amp;Units=SI</a>
<b>Crippen Method:</b>	<a href="http://pubs.acs.org/doi/abs/10.1021/ci990307l">http://pubs.acs.org/doi/abs/10.1021/ci990307l</a>
<b>Crippen Method:</b>	<a href="https://www.cheméo.com/doc/models/crippen_log10ws">https://www.cheméo.com/doc/models/crippen_log10ws</a>
<b>Joback Method:</b>	<a href="https://en.wikipedia.org/wiki/Joback_method">https://en.wikipedia.org/wiki/Joback_method</a>

# Legend

<b>cpg:</b>	Ideal gas heat capacity
<b>gf:</b>	Standard Gibbs free energy of formation
<b>hf:</b>	Enthalpy of formation at standard conditions
<b>hfus:</b>	Enthalpy of fusion at standard conditions
<b>hvap:</b>	Enthalpy of vaporization at standard conditions
<b>log10ws:</b>	Log10 of Water solubility in mol/l
<b>logp:</b>	Octanol/Water partition coefficient
<b>mcvol:</b>	McGowan's characteristic volume
<b>pc:</b>	Critical Pressure
<b>rinpola:</b>	Non-polar retention indices
<b>tb:</b>	Normal Boiling Point Temperature
<b>tc:</b>	Critical Temperature
<b>tf:</b>	Normal melting (fusion) point
<b>vc:</b>	Critical Volume

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