

Glutaric acid, 2-(2-fluorophenyl)ethyl isobutyl ester

Inchi:	InChI=1S/C17H23FO4/c1-13(2)12-22-17(20)9-5-8-16(19)21-11-10-14-6-3-4-7-15(14)18/H
InchiKey:	TYSQMLPWWZXYP A-UHFFFAOYSA-N
Formula:	C17H23FO4
SMILES:	CC(C)COC(=O)CCCC(=O)OCCc1ccccc1F
Mol. weight [g/mol]:	310.36

Physical Properties

Property code	Value	Unit	Source
gf	-470.05	kJ/mol	Joback Method
hf	-860.14	kJ/mol	Joback Method
hfus	38.57	kJ/mol	Joback Method
hvap	73.48	kJ/mol	Joback Method
log10ws	-3.86		Crippen Method
logp	3.281		Crippen Method
mcvol	243.280	ml/mol	McGowan Method
pc	1627.22	kPa	Joback Method
rinpol	2134.00		NIST Webbook
tb	771.43	K	Joback Method
tc	968.49	K	Joback Method
tf	450.20	K	Joback Method
vc	0.940	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	712.53	J/mol×K	771.43	Joback Method
cpg	727.61	J/mol×K	804.27	Joback Method
cpg	741.70	J/mol×K	837.12	Joback Method
cpg	754.82	J/mol×K	869.96	Joback Method
cpg	766.97	J/mol×K	902.80	Joback Method
cpg	778.18	J/mol×K	935.65	Joback Method
cpg	788.46	J/mol×K	968.49	Joback Method

Sources

Joback Method:	https://en.wikipedia.org/wiki/Joback_method
McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=U377083&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l
Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws

Legend

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

Latest version available from:

<https://www.chemeo.com/cid/52-037-3/Glutaric-acid-2-2-fluorophenyl-ethyl-isobutyl-ester.pdf>

Generated by Cheméo on 2025-12-05 11:57:10.569347948 +0000 UTC m=+4684028.099388602.

Cheméo (<https://www.chemeo.com>) is the biggest free database of chemical and physical data for the process industry.