

Terephthalic acid, ethyl 4-fluorophenethyl ester

Inchi:	InChI=1S/C18H17FO4/c1-2-22-17(20)14-5-7-15(8-6-14)18(21)23-12-11-13-3-9-16(19)10
InchiKey:	GDMKKTXLTMMEB-UHFFFAOYSA-N
Formula:	C18H17FO4
SMILES:	CCOC(=O)c1ccc(C(=O)OCCc2ccc(F)cc2)cc1
Mol. weight [g/mol]:	316.32

Physical Properties

Property code	Value	Unit	Source
gf	-356.41	kJ/mol	Joback Method
hf	-650.44	kJ/mol	Joback Method
hfus	38.33	kJ/mol	Joback Method
hvap	79.03	kJ/mol	Joback Method
log10ws	-4.74		Crippen Method
logp	3.402		Crippen Method
mvol	233.610	ml/mol	McGowan Method
pc	1945.79	kPa	Joback Method
rinpol	2488.00		NIST Webbook
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tb	826.41	K	Joback Method
tc	1048.06	K	Joback Method
tf	515.41	K	Joback Method
vc	0.893	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	674.47	J/mol×K	826.41	Joback Method
cpg	687.76	J/mol×K	863.35	Joback Method
cpg	699.87	J/mol×K	900.29	Joback Method
cpg	710.85	J/mol×K	937.23	Joback Method
cpg	720.70	J/mol×K	974.18	Joback Method
cpg	729.47	J/mol×K	1011.12	Joback Method
cpg	737.16	J/mol×K	1048.06	Joback Method

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=U416140&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci9903071
Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws
Joback Method:	https://en.wikipedia.org/wiki/Joback_method
McGowan Method:	http://link.springer.com/article/10.1007/BF02311772

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
hvp:	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
rinp:	Non-polar retention indices
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume

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