

Terephthalic acid, 2,5-difluorobenzyl ethyl ester

Inchi:	InChI=1S/C17H14F2O4/c1-2-22-16(20)11-3-5-12(6-4-11)17(21)23-10-13-9-14(18)7-8-15
InchiKey:	NBCOYDZIMKLTLT-UHFFFAOYSA-N
Formula:	C17H14F2O4
SMILES:	CCOC(=O)c1ccc(C(=O)OCc2cc(F)ccc2F)cc1
Mol. weight [g/mol]:	320.29

Physical Properties

Property code	Value	Unit	Source
gf	-569.27	kJ/mol	Joback Method
hf	-837.38	kJ/mol	Joback Method
hfus	38.43	kJ/mol	Joback Method
hvap	76.65	kJ/mol	Joback Method
log10ws	-5.15		Crippen Method
logp	3.498		Crippen Method
mvol	221.290	ml/mol	McGowan Method
pc	2009.10	kPa	Joback Method
rinpol	2875.00		NIST Webbook
rinpol	2875.00		NIST Webbook
tb	807.78	K	Joback Method
tc	1025.18	K	Joback Method
tf	517.25	K	Joback Method
vc	0.856	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	625.44	J/mol×K	807.78	Joback Method
cpg	637.88	J/mol×K	844.01	Joback Method
cpg	649.24	J/mol×K	880.25	Joback Method
cpg	659.55	J/mol×K	916.48	Joback Method
cpg	668.82	J/mol×K	952.71	Joback Method
cpg	677.07	J/mol×K	988.95	Joback Method
cpg	684.30	J/mol×K	1025.18	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=U416194&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l
Crippen Method:	https://www.cheméo.com/doc/models/crippen_log10ws
Joback Method:	https://en.wikipedia.org/wiki/Joback_method

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
h vap:	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
r in pol:	Non-polar retention indices
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume

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