

Isophthalic acid, 2-isopropoxyphenyl pentyl ester

Inchi:	InChI=1S/C22H26O5/c1-4-5-8-14-25-21(23)17-10-9-11-18(15-17)22(24)27-20-13-7-6-12
InchiKey:	PLIMPCQANUOFNE-UHFFFAOYSA-N
Formula:	C22H26O5
SMILES:	CCCCCOC(=O)c1cccc(C(=O)Oc2ccccc2OC(C)C)c1
Mol. weight [g/mol]:	370.44

Physical Properties

Property code	Value	Unit	Source
gf	-235.36	kJ/mol	Joback Method
hf	-674.39	kJ/mol	Joback Method
hfus	43.28	kJ/mol	Joback Method
hvap	90.78	kJ/mol	Joback Method
log10ws	-6.54		Crippen Method
logp	5.040		Crippen Method
mvol	294.070	ml/mol	McGowan Method
pc	1462.37	kPa	Joback Method
rinpol	2788.00		NIST Webbook
rinpol	2788.00		NIST Webbook
tb	940.64	K	Joback Method
tc	1165.59	K	Joback Method
tf	567.13	K	Joback Method
vc	1.111	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	924.67	J/molxK	940.64	Joback Method
cpg	977.19	J/molxK	1128.10	Joback Method
cpg	969.59	J/molxK	1090.61	Joback Method
cpg	960.56	J/molxK	1053.12	Joback Method
cpg	950.08	J/molxK	1015.62	Joback Method
cpg	938.12	J/molxK	978.13	Joback Method
cpg	983.38	J/molxK	1165.59	Joback Method
dvisc	0.0000295	Paxs	940.64	Joback Method

dvisc	0.0000376	Paxs	878.39	Joback Method
dvisc	0.0000499	Paxs	816.14	Joback Method
dvisc	0.0000692	Paxs	753.88	Joback Method
dvisc	0.0001020	Paxs	691.63	Joback Method
dvisc	0.0001621	Paxs	629.38	Joback Method
dvisc	0.0002854	Paxs	567.13	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=U344429&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

Legend

cp_g:	Ideal gas heat capacity
dvisc:	Dynamic viscosity
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:	Log ₁₀ of Water solubility in mol/l
log_p:	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

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