

Isophthalic acid, isoheptyl 2-isopropylphenyl ester

Inchi:	InChI=1S/C23H28O4/c1-16(2)9-8-14-26-22(24)18-10-7-11-19(15-18)23(25)27-21-13-6-5
InchiKey:	YYIYIINSMEGK-UHFFFAOYSA-N
Formula:	C23H28O4
SMILES:	CC(C)CCCOC(=O)c1cccc(C(=O)Oc2ccccc2C(C)C)c1
Mol. weight [g/mol]:	368.47

Physical Properties

Property code	Value	Unit	Source
gf	-124.38	kJ/mol	Joback Method
hf	-568.09	kJ/mol	Joback Method
hfus	41.16	kJ/mol	Joback Method
hvap	90.20	kJ/mol	Joback Method
log10ws	-6.84		Crippen Method
logp	5.622		Crippen Method
mvol	302.290	ml/mol	McGowan Method
pc	1386.08	kPa	Joback Method
rinpol	2765.00		NIST Webbook
rinpol	2765.00		NIST Webbook
tb	940.66	K	Joback Method
tc	1167.15	K	Joback Method
tf	541.17	K	Joback Method
vc	1.143	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	956.88	J/molxK	940.66	Joback Method
cpg	971.30	J/molxK	978.41	Joback Method
cpg	984.28	J/molxK	1016.16	Joback Method
cpg	995.86	J/molxK	1053.90	Joback Method
cpg	1006.09	J/molxK	1091.65	Joback Method
cpg	1015.00	J/molxK	1129.40	Joback Method
cpg	1022.64	J/molxK	1167.15	Joback Method
dvisc	0.0004011	Paxs	541.17	Joback Method

dvisc	0.0002076	Paxs	607.75	Joback Method
dvisc	0.0001224	Paxs	674.33	Joback Method
dvisc	0.0000794	Paxs	740.91	Joback Method
dvisc	0.0000553	Paxs	807.50	Joback Method
dvisc	0.0000407	Paxs	874.08	Joback Method
dvisc	0.0000312	Paxs	940.66	Joback Method

Sources

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
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=U344635&Units=SI

Legend

cpg:	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
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/88-624-2/Isophthalic-acid-isohexyl-2-isopropylphenyl-ester.pdf>

Generated by Cheméo on 2024-04-26 04:57:50.50997714 +0000 UTC m=+16396719.430554461.

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