

Fumaric acid, isobutyl 2-propylphenyl ester

Inchi:	InChI=1S/C17H22O4/c1-4-7-14-8-5-6-9-15(14)21-17(19)11-10-16(18)20-12-13(2)3/h5-6,
InchiKey:	DEKPJOQHODOEHC-ZHACJKMWSA-N
Formula:	C17H22O4
SMILES:	CCCC1CCCC1OC(=O)C=CC(=O)OCC(C)C
Mol. weight [g/mol]:	290.35

Physical Properties

Property code	Value	Unit	Source
gf	-195.02	kJ/mol	Joback Method
hf	-546.81	kJ/mol	Joback Method
hfus	35.69	kJ/mol	Joback Method
hvap	74.26	kJ/mol	Joback Method
log10ws	-3.99		Crippen Method
logp	3.300		Crippen Method
mcvol	237.210	ml/mol	McGowan Method
pc	1762.45	kPa	Joback Method
rinsol	2021.00		NIST Webbook
tb	776.32	K	Joback Method
tc	985.42	K	Joback Method
tf	444.53	K	Joback Method
vc	0.901	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	679.89	J/molxK	776.32	Joback Method
cpg	695.01	J/molxK	811.17	Joback Method
cpg	709.10	J/molxK	846.02	Joback Method
cpg	722.20	J/molxK	880.87	Joback Method
cpg	734.32	J/molxK	915.72	Joback Method
cpg	745.51	J/molxK	950.57	Joback Method
cpg	755.77	J/molxK	985.42	Joback Method
dvisc	0.0008333	Paxs	444.53	Joback Method
dvisc	0.0004315	Paxs	499.83	Joback Method

dvisc	0.0002548	Paxs	555.13	Joback Method
dvisc	0.0001655	Paxs	610.42	Joback Method
dvisc	0.0001155	Paxs	665.72	Joback Method
dvisc	0.0000852	Paxs	721.02	Joback Method
dvisc	0.0000656	Paxs	776.32	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=U348125&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

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