

Fumaric acid, 2-methoxyphenyl 3-methylbut-2-yl ester

Inchi:	InChI=1S/C16H20O5/c1-11(2)12(3)20-15(17)9-10-16(18)21-14-8-6-5-7-13(14)19-4/h5-12
InchiKey:	ZXSHXGYSXHWSNC-MDZDMXLPSA-N
Formula:	C16H20O5
SMILES:	COc1ccccc1OC(=O)C=CC(=O)OC(C)C(C)C
Mol. weight [g/mol]:	292.33

Physical Properties

Property code	Value	Unit	Source
gf	-310.88	kJ/mol	Joback Method
hf	-663.67	kJ/mol	Joback Method
hfus	30.77	kJ/mol	Joback Method
hvap	74.05	kJ/mol	Joback Method
log10ws	-3.42		Crippen Method
logp	2.744		Crippen Method
mvol	228.990	ml/mol	McGowan Method
pc	1898.60	kPa	Joback Method
rinpol	2067.00		NIST Webbook
rinpol	2067.00		NIST Webbook
tb	775.42	K	Joback Method
tc	988.41	K	Joback Method
tf	440.49	K	Joback Method
vc	0.858	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	652.33	J/molxK	775.42	Joback Method
cpg	714.98	J/molxK	952.91	Joback Method
cpg	704.54	J/molxK	917.41	Joback Method
cpg	693.06	J/molxK	881.91	Joback Method
cpg	680.55	J/molxK	846.42	Joback Method
cpg	666.97	J/molxK	810.92	Joback Method
cpg	724.39	J/molxK	988.41	Joback Method
dvisc	0.0000523	Paxs	775.42	Joback Method

dvisc	0.0000686	Paxs	719.60	Joback Method
dvisc	0.0000942	Paxs	663.78	Joback Method
dvisc	0.0001371	Paxs	607.95	Joback Method
dvisc	0.0002151	Paxs	552.13	Joback Method
dvisc	0.0003735	Paxs	496.31	Joback Method
dvisc	0.0007462	Paxs	440.49	Joback Method

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=U405928&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
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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