

Cyclopropanecarboxylic acid, trans-2-phenyl-, phenyl ester

Inchi:	InChI=1S/C16H14O2/c17-16(18-13-9-5-2-6-10-13)15-11-14(15)12-7-3-1-4-8-12/h1-10,14
InchiKey:	RFWVVXSKWXDEGN-UHFFFAOYSA-N
Formula:	C16H14O2
SMILES:	O=C(Oc1ccccc1)C1CC1c1ccccc1
Mol. weight [g/mol]:	238.28

Physical Properties

Property code	Value	Unit	Source
gf	127.78	kJ/mol	Joback Method
hf	-92.85	kJ/mol	Joback Method
hfus	27.27	kJ/mol	Joback Method
hvap	64.52	kJ/mol	Joback Method
log10ws	-3.85		Crippen Method
logp	3.396		Crippen Method
mvol	185.360	ml/mol	McGowan Method
pc	2632.55	kPa	Joback Method
rinpol	2036.00		NIST Webbook
rinpol	2036.00		NIST Webbook
tb	697.20	K	Joback Method
tc	946.14	K	Joback Method
tf	408.78	K	Joback Method
vc	0.696	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	506.17	J/molxK	697.20	Joback Method
cpg	523.22	J/molxK	738.69	Joback Method
cpg	538.83	J/molxK	780.18	Joback Method
cpg	553.10	J/molxK	821.67	Joback Method
cpg	566.14	J/molxK	863.16	Joback Method
cpg	578.04	J/molxK	904.65	Joback Method
cpg	588.91	J/molxK	946.14	Joback Method
dvisc	0.0018090	Paxs	408.78	Joback Method

dvisc	0.0012332	Paxs	456.85	Joback Method
dvisc	0.0009043	Paxs	504.92	Joback Method
dvisc	0.0006999	Paxs	552.99	Joback Method
dvisc	0.0005643	Paxs	601.06	Joback Method
dvisc	0.0004697	Paxs	649.13	Joback Method
dvisc	0.0004010	Paxs	697.20	Joback Method

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=U406881&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

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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