

cis-Cyclohex-4-en-1,2-dicarboxylic acid, 2-ethylbutyl propyl ester

Inchi:	InChI=1S/C17H28O4/c1-4-11-20-16(18)14-9-7-8-10-15(14)17(19)21-12-13(5-2)6-3/h7-8,
InchiKey:	JSOQUSBINRGBFO-UHFFFAOYSA-N
Formula:	C17H28O4
SMILES:	CCCOC(=O)C1CC=CCC1C(=O)OCC(CC)CC
Mol. weight [g/mol]:	296.40

Physical Properties

Property code	Value	Unit	Source
gf	-331.32	kJ/mol	Joback Method
hf	-797.33	kJ/mol	Joback Method
hfus	35.96	kJ/mol	Joback Method
hvap	71.77	kJ/mol	Joback Method
log10ws	-3.69		Crippen Method
logp	3.501		Crippen Method
mcvol	250.110	ml/mol	McGowan Method
pc	1547.57	kPa	Joback Method
rinpol	1953.00		NIST Webbook
rinpol	1953.00		NIST Webbook
tb	754.54	K	Joback Method
tc	953.24	K	Joback Method
tf	414.57	K	Joback Method
vc	0.948	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	764.19	J/molxK	754.54	Joback Method
cpg	782.54	J/molxK	787.66	Joback Method
cpg	799.71	J/molxK	820.77	Joback Method
cpg	815.69	J/molxK	853.89	Joback Method
cpg	830.50	J/molxK	887.00	Joback Method
cpg	844.16	J/molxK	920.12	Joback Method
cpg	856.66	J/molxK	953.24	Joback Method
dvisc	0.0015094	Paxs	414.57	Joback Method

dvisc	0.0007381	Paxs	471.23	Joback Method
dvisc	0.0004209	Paxs	527.89	Joback Method
dvisc	0.0002676	Paxs	584.56	Joback Method
dvisc	0.0001843	Paxs	641.22	Joback Method
dvisc	0.0001349	Paxs	697.88	Joback Method
dvisc	0.0001034	Paxs	754.54	Joback Method

Sources

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=U382805&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci9903071

Legend

cp_g:	Ideal gas heat capacity
dvisc:	Dynamic viscosity
g_f:	Standard Gibbs free energy of formation
h_f:	Enthalpy of formation at standard conditions
h_{fus}:	Enthalpy of fusion at standard conditions
h_{vap}:	Enthalpy of vaporization at standard conditions
log₁₀w_s:	Log ₁₀ of Water solubility in mol/l
log_p:	Octanol/Water partition coefficient
mc_{vol}:	McGowan's characteristic volume
pc:	Critical Pressure
rin_{pol}:	Non-polar retention indices
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume

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