

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

Inchi:	InChI=1S/C20H34O4/c1-4-7-8-11-14-23-19(21)17-12-9-10-13-18(17)20(22)24-15-16(5-2
InchiKey:	GVUVZXSCSNOUKM-UHFFFAOYSA-N
Formula:	C20H34O4
SMILES:	CCCCCOC(=O)C1CC=CCC1C(=O)OCC(CC)CC
Mol. weight [g/mol]:	338.48

Physical Properties

Property code	Value	Unit	Source
gf	-306.06	kJ/mol	Joback Method
hf	-859.25	kJ/mol	Joback Method
hfus	43.73	kJ/mol	Joback Method
hvap	78.45	kJ/mol	Joback Method
log10ws	-4.94		Crippen Method
logp	4.672		Crippen Method
mvol	292.380	ml/mol	McGowan Method
pc	1248.61	kPa	Joback Method
rinpol	2239.00		NIST Webbook
rinpol	2239.00		NIST Webbook
tb	823.18	K	Joback Method
tc	1020.86	K	Joback Method
tf	448.38	K	Joback Method
vc	1.115	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	942.11	J/molxK	823.18	Joback Method
cpg	1022.51	J/molxK	987.91	Joback Method
cpg	1008.98	J/molxK	954.96	Joback Method
cpg	994.20	J/molxK	922.02	Joback Method
cpg	978.14	J/molxK	889.07	Joback Method
cpg	960.78	J/molxK	856.13	Joback Method
cpg	1034.79	J/molxK	1020.86	Joback Method
dvisc	0.0000698	Paxs	823.18	Joback Method

dvisc	0.0000918	Paxs	760.71	Joback Method
dvisc	0.0001268	Paxs	698.25	Joback Method
dvisc	0.0001867	Paxs	635.78	Joback Method
dvisc	0.0002991	Paxs	573.31	Joback Method
dvisc	0.0005375	Paxs	510.85	Joback Method
dvisc	0.0011375	Paxs	448.38	Joback Method

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=U382808&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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