Diisopropyl adipate

Other names:	Hexanedioic acid, bis(1-methylethyl) ester
	Adipic acid, diisopropyl ester
	Ceraphyl 230
	Isopropyl adipate
	Standamul DIPA
	Wickenol 116
	«beta» dia
	Crodamol DA
	iso-Adipate 2/043700
	Prodipate
	Schercemol DIA
	Tegester 504-D
	Beta dia
	Unimate DIPA
	Hexanedioic acid, 1,6-bis(1-methylethyl) ester
	NSC 56587
	Diisopropyl hexanedioate
Inchi:	InChI=1S/C12H22O4/c1-9(2)15-11(13)7-5-6-8-12(14)16-10(3)4/h9-10H,5-8H2,1-4H3
InchiKey:	ZDQWESQEGGJUCH-UHFFFAOYSA-N
Formula:	C12H22O4
SMILES:	CC(C)OC(=O)CCCCC(=O)OC(C)C
Mol. weight [g/mol]:	230.30
CAS:	6938-94-9

Physical Properties

Property code	Value	Unit	Source
gf	-422.56	kJ/mol	Joback Method
hf	-791.17	kJ/mol	Joback Method
hfus	25.36	kJ/mol	Joback Method
hvap	59.84	kJ/mol	Joback Method
log10ws	-2.79		Crippen Method
logp	2.450		Crippen Method
mcvol	194.820	ml/mol	McGowan Method
pc	1954.41	kPa	Joback Method
rinpol	1425.00		NIST Webbook
rinpol	1425.00		NIST Webbook
rinpol	1464.00		NIST Webbook

rinpol	1464.00		NIST Webbook
rinpol	1464.00		NIST Webbook
rinpol	1430.00		NIST Webbook
rinpol	1429.00		NIST Webbook
rinpol	1427.00		NIST Webbook
rinpol	1424.00		NIST Webbook
rinpol	1425.00		NIST Webbook
rinpol	1427.00		NIST Webbook
tb	625.66	K	Joback Method
tc	808.87	K	Joback Method
tf	339.32	K	Joback Method
vc	0.744	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	516.81	J/mol×K	625.66	Joback Method
cpg	531.92	J/mol×K	656.19	Joback Method
cpg	546.34	J/mol×K	686.73	Joback Method
cpg	560.07	J/mol×K	717.26	Joback Method
cpg	573.11	J/mol×K	747.80	Joback Method
cpg	585.47	J/mol×K	778.33	Joback Method
cpg	597.13	J/mol×K	808.87	Joback Method
dvisc	0.0027555	Pa×s	339.32	Joback Method
dvisc	0.0012154	Pa×s	387.04	Joback Method
dvisc	0.0006416	Pa×s	434.77	Joback Method
dvisc	0.0003843	Pa×s	482.49	Joback Method
dvisc	0.0002525	Pa×s	530.21	Joback Method
dvisc	0.0001778	Pa×s	577.94	Joback Method
dvisc	0.0001321	Pa×s	625.66	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=C6938949&Units=SI

Crippen Method: http://pubs.acs.org/doi/abs/10.1021/ci990307l

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