

Adipic acid, octyl pent-4-en-2-yl ester

Inchi:	InChI=1S/C19H34O4/c1-4-6-7-8-9-12-16-22-18(20)14-10-11-15-19(21)23-17(3)13-5-2/h5
InchiKey:	IOXXCUCRDKPOBB-UHFFFAOYSA-N
Formula:	C19H34O4
SMILES:	<chem>C=CCC(C)OC(=O)CCCC(=O)OCCCCCCCC</chem>
Mol. weight [g/mol]:	326.47

Physical Properties

Property code	Value	Unit	Source
gf	-273.34	kJ/mol	Joback Method
hf	-804.94	kJ/mol	Joback Method
hfus	45.74	kJ/mol	Joback Method
hvap	75.14	kJ/mol	Joback Method
log10ws	-5.47		Crippen Method
logp	4.958		Crippen Method
mcvol	289.150	ml/mol	McGowan Method
pc	1189.06	kPa	Joback Method
rinsol	2148.00		NIST Webbook
tb	782.94	K	Joback Method
tc	965.60	K	Joback Method
tf	431.45	K	Joback Method
vc	1.123	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	883.01	J/molxK	782.94	Joback Method
cpg	900.42	J/molxK	813.38	Joback Method
cpg	916.86	J/molxK	843.83	Joback Method
cpg	932.34	J/molxK	874.27	Joback Method
cpg	946.90	J/molxK	904.71	Joback Method
cpg	960.54	J/molxK	935.16	Joback Method
cpg	973.28	J/molxK	965.60	Joback Method
dvisc	0.0011185	Paxs	431.45	Joback Method
dvisc	0.0005136	Paxs	490.03	Joback Method

dvisc	0.0002785	Paxs	548.61	Joback Method
dvisc	0.0001700	Paxs	607.20	Joback Method
dvisc	0.0001131	Paxs	665.78	Joback Method
dvisc	0.0000804	Paxs	724.36	Joback Method
dvisc	0.0000602	Paxs	782.94	Joback Method

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=U354124&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

Latest version available from:

<https://www.chemeo.com/cid/14-666-7/Adipic-acid-octyl-pent-4-en-2-yl-ester.pdf>

Generated by Cheméo on 2024-04-27 06:21:11.998491748 +0000 UTC m=+16488120.919069064.

Cheméo (<https://www.chemeo.com>) is the biggest free database of chemical and physical data for the process industry.