

# Decanedioic acid, bis(2-ethoxyethyl) ester

<b>Other names:</b>	Bis(2-ethoxyethyl)sebacate Sebacic acid, bis(2-ethoxyethyl) ester di-(Ethoxyethyl) sebacate Sebacic acid, di(2-ethoxyethyl) ester
<b>Inchi:</b>	InChI=1S/C18H34O6/c1-3-21-13-15-23-17(19)11-9-7-5-6-8-10-12-18(20)24-16-14-22-4-2
<b>InchiKey:</b>	UVRXDBUBNLXONB-UHFFFAOYSA-N
<b>Formula:</b>	C18H34O6
<b>SMILES:</b>	CCOCCOC(=O)CCCCCCCCC(=O)OCCOCC
<b>Mol. weight [g/mol]:</b>	346.46
<b>CAS:</b>	624-10-2

## Physical Properties

Property code	Value	Unit	Source
gf	-577.16	kJ/mol	Joback Method
hf	-1168.89	kJ/mol	Joback Method
hfus	50.33	kJ/mol	Joback Method
hvap	78.79	kJ/mol	Joback Method
log10ws	-3.26		Crippen Method
logp	3.267		Crippen Method
mcvol	291.100	ml/mol	McGowan Method
pc	1198.96	kPa	Joback Method
rinpol	2270.00		NIST Webbook
rinpol	2270.00		NIST Webbook
rinpol	2270.00		NIST Webbook
tb	808.66	K	Joback Method
tc	992.65	K	Joback Method
tf	481.40	K	Joback Method
vc	1.127	m3/kmol	Joback Method

## Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	911.35	J/molxK	808.66	Joback Method
cpg	985.71	J/molxK	961.99	Joback Method

cpg	972.97	J/molxK	931.32	Joback Method
cpg	959.16	J/molxK	900.66	Joback Method
cpg	944.28	J/molxK	869.99	Joback Method
cpg	928.34	J/molxK	839.33	Joback Method
cpg	997.37	J/molxK	992.65	Joback Method
dvisc	0.0000399	Paxs	808.66	Joback Method
dvisc	0.0000521	Paxs	754.12	Joback Method
dvisc	0.0000709	Paxs	699.57	Joback Method
dvisc	0.0001018	Paxs	645.03	Joback Method
dvisc	0.0001561	Paxs	590.49	Joback Method
dvisc	0.0002611	Paxs	535.94	Joback Method
dvisc	0.0004909	Paxs	481.40	Joback Method

## Sources

<b>Crippen Method:</b>	<a href="http://pubs.acs.org/doi/abs/10.1021/ci9903071">http://pubs.acs.org/doi/abs/10.1021/ci9903071</a>
<b>Crippen Method:</b>	<a href="https://www.chemeo.com/doc/models/crippen_log10ws">https://www.chemeo.com/doc/models/crippen_log10ws</a>
<b>Joback Method:</b>	<a href="https://en.wikipedia.org/wiki/Joback_method">https://en.wikipedia.org/wiki/Joback_method</a>
<b>McGowan Method:</b>	<a href="http://link.springer.com/article/10.1007/BF02311772">http://link.springer.com/article/10.1007/BF02311772</a>
<b>NIST Webbook:</b>	<a href="http://webbook.nist.gov/cgi/cbook.cgi?ID=C624102&amp;Units=SI">http://webbook.nist.gov/cgi/cbook.cgi?ID=C624102&amp;Units=SI</a>

## Legend

<b>cpg:</b>	Ideal gas heat capacity
<b>dvisc:</b>	Dynamic viscosity
<b>gf:</b>	Standard Gibbs free energy of formation
<b>hf:</b>	Enthalpy of formation at standard conditions
<b>hfus:</b>	Enthalpy of fusion at standard conditions
<b>hvap:</b>	Enthalpy of vaporization at standard conditions
<b>log10ws:</b>	Log10 of Water solubility in mol/l
<b>logp:</b>	Octanol/Water partition coefficient
<b>mcvol:</b>	McGowan's characteristic volume
<b>pc:</b>	Critical Pressure
<b>rinpol:</b>	Non-polar retention indices
<b>tb:</b>	Normal Boiling Point Temperature
<b>tc:</b>	Critical Temperature
<b>tf:</b>	Normal melting (fusion) point
<b>vc:</b>	Critical Volume

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