

# Fumaric acid, cis-hex-3-enyl decyl ester

<b>Inchi:</b>	InChI=1S/C20H34O4/c1-3-5-7-9-10-11-12-14-18-24-20(22)16-15-19(21)23-17-13-8-6-4-2
<b>InchiKey:</b>	PINHCRBPYQCCBD-XOBIQLOZSA-N
<b>Formula:</b>	C20H34O4
<b>SMILES:</b>	CCC=CCCOC(=O)C=CC(=O)OCCCCCCCCC
<b>Mol. weight [g/mol]:</b>	338.48

## Physical Properties

Property code	Value	Unit	Source
gf	-189.88	kJ/mol	Joback Method
hf	-711.29	kJ/mol	Joback Method
hfus	53.53	kJ/mol	Joback Method
hvap	78.34	kJ/mol	Joback Method
log10ws	-5.63		Crippen Method
logp	5.126		Crippen Method
mvol	298.940	ml/mol	McGowan Method
pc	1155.35	kPa	Joback Method
rinpol	2389.00		NIST Webbook
rinpol	2389.00		NIST Webbook
tb	817.90	K	Joback Method
tc	1006.76	K	Joback Method
tf	449.32	K	Joback Method
vc	1.163	m <sup>3</sup> /kmol	Joback Method

## Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	918.35	J/molxK	817.90	Joback Method
cpg	994.93	J/molxK	975.28	Joback Method
cpg	981.37	J/molxK	943.80	Joback Method
cpg	966.96	J/molxK	912.33	Joback Method
cpg	951.68	J/molxK	880.85	Joback Method
cpg	935.49	J/molxK	849.38	Joback Method
cpg	1007.70	J/molxK	1006.76	Joback Method
dvisc	0.0000403	Paxs	817.90	Joback Method

dvisc	0.0000537	Paxs	756.47	Joback Method
dvisc	0.0000752	Paxs	695.04	Joback Method
dvisc	0.0001123	Paxs	633.61	Joback Method
dvisc	0.0001831	Paxs	572.18	Joback Method
dvisc	0.0003356	Paxs	510.75	Joback Method
dvisc	0.0007261	Paxs	449.32	Joback Method

## Sources

<b>NIST Webbook:</b>	<a href="http://webbook.nist.gov/cgi/cbook.cgi?ID=U348866&amp;Units=SI">http://webbook.nist.gov/cgi/cbook.cgi?ID=U348866&amp;Units=SI</a>
<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>

## 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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