

Fumaric acid, cis-hex-3-enyl propyl ester

Inchi: InChI=1S/C13H20O4/c1-3-5-6-7-11-17-13(15)9-8-12(14)16-10-4-2/h5-6,8-9H,3-4,7,10-11H
InchiKey: SSGOPRWMTHYQSV-UEPDSTOUSA-N
Formula: C13H20O4
SMILES: CCC=CCCOC(=O)C=CC(=O)OCCC
Mol. weight [g/mol]: 240.30

Physical Properties

Property code	Value	Unit	Source
gf	-248.82	kJ/mol	Joback Method
hf	-566.81	kJ/mol	Joback Method
hfus	35.40	kJ/mol	Joback Method
hvap	62.76	kJ/mol	Joback Method
log10ws	-2.70		Crippen Method
logp	2.395		Crippen Method
mcvol	200.310	ml/mol	McGowan Method
pc	1940.65	kPa	Joback Method
rinpol	1690.00		NIST Webbook
rinpol	1690.00		NIST Webbook
tb	657.74	K	Joback Method
tc	846.12	K	Joback Method
tf	370.43	K	Joback Method
vc	0.771	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	525.14	J/molxK	657.74	Joback Method
cpg	539.27	J/molxK	689.14	Joback Method
cpg	552.69	J/molxK	720.53	Joback Method
cpg	565.41	J/molxK	751.93	Joback Method
cpg	577.46	J/molxK	783.32	Joback Method
cpg	588.85	J/molxK	814.72	Joback Method
cpg	599.61	J/molxK	846.12	Joback Method
dvisc	0.0013734	Paxs	370.43	Joback Method

dvisc	0.0006908	Paxs	418.31	Joback Method
dvisc	0.0004002	Paxs	466.20	Joback Method
dvisc	0.0002566	Paxs	514.09	Joback Method
dvisc	0.0001775	Paxs	561.97	Joback Method
dvisc	0.0001301	Paxs	609.86	Joback Method
dvisc	0.0000998	Paxs	657.74	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=U348859&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l

Legend

cp_g:	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:	Log ₁₀ of Water solubility in mol/l
logp:	Octanol/Water partition coefficient
m_{cvol}:	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/62-776-2/Fumaric-acid-cis-hex-3-enyl-propyl-ester.pdf>

Generated by Cheméo on 2024-09-20 07:48:17.263962097 +0000 UTC m=+1399359.900931346.

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