

2-Propenoic acid, 2-methyl-, cyclohexyl ester

Other names:	2-Methyl-2-propenoic acid, cyclohexyl ester Ageflex CHMA Cyclohexyl methacrylate, monomer cyclohexyl 2-methylpropenoate cyclohexyl methacrylate methacrylic acid, cyclohexyl ester
Inchi:	InChI=1S/C10H16O2/c1-8(2)10(11)12-9-6-4-3-5-7-9/h9H,1,3-7H2,2H3
InchiKey:	OIWOHHBRDFKZNC-UHFFFAOYSA-N
Formula:	C10H16O2
SMILES:	C=C(C)C(=O)OC1CCCCC1
Mol. weight [g/mol]:	168.23
CAS:	101-43-9

Physical Properties

Property code	Value	Unit	Source
gf	-96.86	kJ/mol	Joback Method
hf	-324.57	kJ/mol	Joback Method
hfus	13.69	kJ/mol	Joback Method
hvap	46.85	kJ/mol	Joback Method
log10ws	-2.73		Crippen Method
logp	2.438		Crippen Method
mcvol	144.040	ml/mol	McGowan Method
pc	2829.33	kPa	Joback Method
tb	520.60	K	Joback Method
tc	734.32	K	Joback Method
tf	266.28	K	Joback Method
vc	0.534	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	336.20	J/mol×K	520.60	Joback Method
cpg	353.76	J/mol×K	556.22	Joback Method
cpg	370.37	J/mol×K	591.84	Joback Method

cpg	386.05	J/mol×K	627.46	Joback Method
cpg	400.81	J/mol×K	663.08	Joback Method
cpg	414.69	J/mol×K	698.70	Joback Method
cpg	427.69	J/mol×K	734.32	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C101439&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci9903071
Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws
Phase Behavior of the Binary Mixture of Cyclohexyl Acrylate and Cyclohexyl Methacrylate:	https://www.doi.org/10.1021/je0497707
Joback Method: Supercritical Carbon Dioxide:	https://en.wikipedia.org/wiki/Joback_method

Legend

cpg:	Ideal gas heat capacity
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
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/44-661-9/2-Propenoic-acid-2-methyl-cyclohexyl-ester.pdf>

Generated by Cheméo on 2024-04-19 14:51:41.139172554 +0000 UTC m=+15827550.059749870.

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