

2-Propenoic acid, 2-methyl-, (tetrahydro-2-furanyl)methyl ester

Other names:	(tetrahydrofuran-2-yl)methyl methacrylate Ageflex THFMA Methacrylic acid, tetrahydrofurfuryl ester SR 203 Sartomer SR 203 tetrahydrofurfuryl methacrylate
Inchi:	InChI=1S/C9H14O3/c1-7(2)9(10)12-6-8-4-3-5-11-8/h8H,1,3-6H2,2H3
InchiKey:	LCXXNKZQVOXMEH-UHFFFAOYSA-N
Formula:	C9H14O3
SMILES:	C=C(C)C(=O)OCC1CCCO1
Mol. weight [g/mol]:	170.21
CAS:	2455-24-5

Physical Properties

Property code	Value	Unit	Source
gf	-179.30	kJ/mol	Joback Method
hf	-429.77	kJ/mol	Joback Method
hfus	21.18	kJ/mol	Joback Method
hvap	48.96	kJ/mol	Joback Method
log10ws	-1.40		Crippen Method
logp	1.285		Crippen Method
mcvol	135.820	ml/mol	McGowan Method
pc	3025.61	kPa	Joback Method
tb	520.40	K	Joback Method
tc	728.24	K	Joback Method
tf	285.10	K	Joback Method
vc	0.507	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	320.69	J/mol×K	520.40	Joback Method
cpg	335.82	J/mol×K	555.04	Joback Method
cpg	350.14	J/mol×K	589.68	Joback Method

cpg	363.67	J/mol×K	624.32	Joback Method
cpg	376.42	J/mol×K	658.96	Joback Method
cpg	388.43	J/mol×K	693.60	Joback Method
cpg	399.71	J/mol×K	728.24	Joback Method

Sources

High-Pressure Phase Behavior of Carbon Dioxide + Tetrahydrofurfuryl Acrylate and Carbon Dioxide + Tetrahydrofurfuryl Methacrylate Binary Mixture Systems:	https://www.doi.org/10.1021/je2004879
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=C2455245&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci9903071
Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws

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/38-319-6/2-Propenoic-acid-2-methyl-tetrahydro-2-furanyl-methyl-ester.pdf>

Generated by Cheméo on 2024-04-25 16:00:37.196773067 +0000 UTC m=+16350086.117350382.

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