

Octadecyl methacrylate

Inchi:	InChI=1S/C22H42O2/c1-4-5-6-7-8-9-10-11-12-13-14-15-16-17-18-19-20-24-22(23)21(2)3
InchiKey:	HMZGPNHSPWNGEP-UHFFFAOYSA-N
Formula:	C22H42O2
SMILES:	C=C(C)C(=O)OCCCCCCCCCCCCCCCCCC
Mol. weight [g/mol]:	338.57
CAS:	112-08-3

Physical Properties

Property code	Value	Unit	Source
gf	-20.27	kJ/mol	Joback Method
hf	-626.57	kJ/mol	Joback Method
hfus	52.93	kJ/mol	Joback Method
hvap	73.13	kJ/mol	Joback Method
log10ws	-7.75		Crippen Method
logp	7.367		Crippen Method
mcvol	323.980	ml/mol	McGowan Method
pc	954.37	kPa	Joback Method
tb	775.61	K	Joback Method
tc	953.12	K	Joback Method
tf	394.14	K	Joback Method
vc	1.274	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1004.06	J/molxK	775.61	Joback Method
cpg	1024.17	J/molxK	805.19	Joback Method
cpg	1043.27	J/molxK	834.78	Joback Method
cpg	1061.41	J/molxK	864.36	Joback Method
cpg	1078.61	J/molxK	893.95	Joback Method
cpg	1094.90	J/molxK	923.53	Joback Method
cpg	1110.33	J/molxK	953.12	Joback Method

Sources

Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307I
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=C112083&Units=SI

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
mccvol:	McGowan's characteristic volume
pc:	Critical Pressure
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume

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