

Methacrylic acid, nonadecyl ester

Inchi:	InChI=1S/C23H44O2/c1-4-5-6-7-8-9-10-11-12-13-14-15-16-17-18-19-20-21-25-23(24)22
InchiKey:	YGPZXPHFJSYIKP-UHFFFAOYSA-N
Formula:	C23H44O2
SMILES:	C=C(C)C(=O)OCCCCCCCCCCCCCCCCCCC
Mol. weight [g/mol]:	352.59

Physical Properties

Property code	Value	Unit	Source
gf	-11.85	kJ/mol	Joback Method
hf	-647.21	kJ/mol	Joback Method
hfus	55.52	kJ/mol	Joback Method
hvap	75.36	kJ/mol	Joback Method
log10ws	-8.17		Crippen Method
logp	7.757		Crippen Method
mvol	338.070	ml/mol	McGowan Method
pc	900.18	kPa	Joback Method
rinpol	2476.00		NIST Webbook
rinpol	2476.00		NIST Webbook
tb	798.49	K	Joback Method
tc	979.16	K	Joback Method
tf	405.41	K	Joback Method
vc	1.329	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1066.02	J/mol×K	798.49	Joback Method
cpg	1086.59	J/mol×K	828.60	Joback Method
cpg	1106.10	J/mol×K	858.71	Joback Method
cpg	1124.60	J/mol×K	888.82	Joback Method
cpg	1142.11	J/mol×K	918.93	Joback Method
cpg	1158.68	J/mol×K	949.04	Joback Method
cpg	1174.34	J/mol×K	979.16	Joback Method

Sources

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=U340295&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l
Crippen Method:	https://www.cheméo.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
hvp:	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
rinp:	Non-polar retention indices
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume

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