

N-tert-Octylacrylamide

Other names:	2-Propenamide, N-(1,1,3,3-tetramethylbutyl)- tert-Octylacrylamide Acrylamide, N-(1,1,3,3-tetramethylbutyl)- N-(1,1,3,3-Tetramethylbutyl)acrylamide Acrylamide, N-(5,5-dimethylhexyl)-
Inchi:	InChI=1S/C11H21NO/c1-7-9(13)12-11(5,6)8-10(2,3)4/h7H,1,8H2,2-6H3,(H,12,13)
InchiKey:	YRDNVESFWXDNSI-UHFFFAOYSA-N
Formula:	C11H21NO
SMILES:	C=CC(=O)NC(C)(C)CC(C)(C)C
Mol. weight [g/mol]:	183.29
CAS:	4223-03-4

Physical Properties

Property code	Value	Unit	Source
gf	95.73	kJ/mol	Joback Method
hf	-221.55	kJ/mol	Joback Method
hfus	14.84	kJ/mol	Joback Method
hvap	50.00	kJ/mol	Joback Method
log10ws	-3.12		Crippen Method
logp	2.503		Crippen Method
mcvol	173.100	ml/mol	McGowan Method
pc	2229.20	kPa	Joback Method
tb	545.34	K	Joback Method
tc	743.11	K	Joback Method
tf	319.40	K	Joback Method
vc	0.651	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	428.72	J/mol×K	545.34	Joback Method
cpg	445.37	J/mol×K	578.30	Joback Method
cpg	460.97	J/mol×K	611.26	Joback Method
cpg	475.59	J/mol×K	644.22	Joback Method

cpg	489.28	J/mol×K	677.19	Joback Method
cpg	502.11	J/mol×K	710.15	Joback Method
cpg	514.14	J/mol×K	743.11	Joback Method

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C4223034&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l
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

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

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