Benzamide, N,N-dinonyl-4-chloro-

Inchi: InChI=1S/C25H42ClNO/c1-3-5-7-9-11-13-15-21-27(22-16-14-12-10-8-6-4-2)25(28)23-17
InchiKey: KFTWLRGQCLZIHZ-UHFFFAOYSA-N
Formula: C25H42ClNO
SMILES: CCCCCCCCCN(CCCCCCCCC)C(=O)c1ccc(Cl)cc1
Mol. weight [g/mol]: 408.06

Physical Properties

Property code	Value	Unit	Source
gf	232.33	kJ/mol	Joback Method
hf	-395.06	kJ/mol	Joback Method
hfus	62.98	kJ/mol	Joback Method
hvap	87.36	kJ/mol	Joback Method
log10ws	-9.00		Crippen Method
logp	8.283		Crippen Method
mcvol	363.140	ml/mol	McGowan Method
pc	930.64	kPa	Joback Method
rinpol	2875.00		NIST Webbook
tb	906.80	K	Joback Method
tc	1111.03	K	Joback Method
tf	522.77	K	Joback Method
vc	1.401	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1173.40	J/mol×K	906.80	Joback Method
cpg	1192.45	J/mol×K	940.84	Joback Method
cpg	1210.35	J/mol×K	974.88	Joback Method
cpg	1227.16	J/mol×K	1008.92	Joback Method
cpg	1242.97	J/mol×K	1042.96	Joback Method
cpg	1257.85	J/mol×K	1077.00	Joback Method
cpg	1271.88	J/mol×K	1111.03	Joback Method

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=U308593&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
rinpol:	Non-polar retention indices
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume