Phenylacetamide, N,N-dinonyl-

Inchi: InChI=1S/C26H45NO/c1-3-5-7-9-11-13-18-22-27(23-19-14-12-10-8-6-4-2)26(28)24-25-2
InchiKey: FQEYZJRPXBAGQB-UHFFFAOYSA-N
Formula: C26H45NO
SMILES: CCCCCCCCCN(CCCCCCCCC)C(=O)Cc1ccccc1
Mol. weight [g/mol]: 387.64

Physical Properties

Property code	Value	Unit	Source
gf	262.31	kJ/mol	Joback Method
hf	-388.49	kJ/mol	Joback Method
hfus	61.76	kJ/mol	Joback Method
hvap	84.53	kJ/mol	Joback Method
log10ws	-8.15		Crippen Method
logp	7.559		Crippen Method
mcvol	364.990	ml/mol	McGowan Method
pc	906.15	kPa	Joback Method
rinpol	2887.00		NIST Webbook
rinpol	2887.00		NIST Webbook
tb	887.27	K	Joback Method
tc	1086.96	K	Joback Method
tf	491.60	K	Joback Method
vc	1.407	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1204.75	J/mol×K	887.27	Joback Method
cpg	1225.17	J/mol×K	920.55	Joback Method
cpg	1244.40	J/mol×K	953.83	Joback Method
cpg	1262.50	J/mol×K	987.11	Joback Method
cpg	1279.55	J/mol×K	1020.40	Joback Method
cpg	1295.62	J/mol×K	1053.68	Joback Method
cpg	1310.81	J/mol×K	1086.96	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=U308414&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

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