N-(3-Methylphenyl)-1-naphthamide

Other names: 1-Naphthalenecarboxamide, N-(3-methylphenyl)-
Inchi: InChI=1S/C18H15NO/c1-13-6-4-9-15(12-13)19-18(20)17-11-5-8-14-7-2-3-10-16(14)17/h2
InchiKey: ZQIBGFUTQCVROE-UHFFFAOYSA-N
Formula: C18H15NO
SMILES: Cc1cccc(NC(=O)c2cccc3ccccc23)c1
Mol. weight [g/mol]: 261.32
CAS: 301822-81-1

Physical Properties

Property code	Value	Unit	Source
gf	373.36	kJ/mol	Joback Method
hf	167.23	kJ/mol	Joback Method
hfus	33.40	kJ/mol	Joback Method
hvap	76.36	kJ/mol	Joback Method
log10ws	-5.73		Crippen Method
logp	4.401		Crippen Method
mcvol	209.050	ml/mol	McGowan Method
pc	2517.59	kPa	Joback Method
rinpol	2543.00		NIST Webbook
tb	797.58	K	Joback Method
tc	1050.01	K	Joback Method
tf	505.79	K	Joback Method
vc	0.790	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	580.99	J/mol×K	797.58	Joback Method
cpg	595.23	J/mol×K	839.65	Joback Method
cpg	608.31	J/mol×K	881.72	Joback Method
cpg	620.36	J/mol×K	923.80	Joback Method
cpg	631.50	J/mol×K	965.87	Joback Method
cpg	641.86	J/mol×K	1007.94	Joback Method
cpg	651.58	J/mol×K	1050.01	Joback Method

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C301822811&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

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