Urea, (3-methylphenyl)-

Other names:	Urea, m-tolyl-
	m-Tolylcarbamide
	m-Tolylurea
	3-Methylphenylurea
	meta-Tolylurea
	3-Tolylurea
	MTC
	MTK
	Metatolylcarbamide
	NSC 2177
	Urea, N-(3-methylphenyl)-
Inchi:	InChI=1S/C8H10N2O/c1-6-3-2-4-7(5-6)10-8(9)11/h2-5H,1H3,(H3,9,10,11)
InchiKey:	UVQVMNIYFXZXCI-UHFFFAOYSA-N
Formula:	C8H10N2O
SMILES:	Cc1cccc(NC(N)=O)c1
Mol. weight [g/mol]:	150.18
CAS:	63-99-0

Physical Properties

Property code	Value	Unit	Source
gf	146.18	kJ/mol	Joback Method
hf	-8.71	kJ/mol	Joback Method
hfus	22.02	kJ/mol	Joback Method
hvap	60.16	kJ/mol	Joback Method
log10ws	-2.14		Crippen Method
logp	1.486		Crippen Method
mcvol	121.350	ml/mol	McGowan Method
pc	4233.04	kPa	Joback Method
tb	590.67	K	Joback Method
tc	823.28	K	Joback Method
tf	404.71	K	Joback Method
vc	0.446	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	286.50	J/mol×K	590.67	Joback Method
cpg	297.98	J/mol×K	629.44	Joback Method
cpg	308.67	J/mol×K	668.21	Joback Method
cpg	318.60	J/mol×K	706.98	Joback Method
cpg	327.79	J/mol×K	745.75	Joback Method
cpg	336.28	J/mol×K	784.52	Joback Method
cpg	344.12	J/mol×K	823.28	Joback Method

Sources

NIST Webbook: http://webbook.nist.gov/cgi/cbook.cgi?ID=C63990&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