

niacin mw 123gm/mole
 .9528 mole = 117 gm/dm³ = 117
 gm/1000mL
 = 11.7 gm/100 mL = 11.7%

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TABLE 3

Solubility of nicotinic acid and isonicotinic acid in organic solvents and water, at
 T = 298.2 K.

= 77F

Solvent	Solubility/mol·dm ⁻³	Ref.
<i>Nicotinic acid</i>		
Butan-1-ol	0.03325	This work
Pentan-1-ol	0.03028	This work
Hexan-1-ol	0.02895	This work
Butan-2-ol	0.03899	This work
Ethanol	0.0631	[6]
Diethyl ether	0.00764	[6]
Propanone	0.0194	[6]
Acetonitrile	0.00384	[6]
DMSO	0.9528	[6]
Water	0.138	[6]
<i>Isonicotinic acid</i>		
Pentan-1-ol	0.00483	This work
Butan-2-ol	0.00616	This work
Propanone	0.00483	This work
Tetrahydrofuran	0.0144	This work
Methanol	0.0152	[7]
Ethanol	0.00977	[7]
Propan-1-ol	0.0103	[7]
Propan-2-ol	0.00709	[7]
Water	0.0467	[8]

neutral to zwitterion equilibrium
 1.22 lg units. This corresponds
 at the isoelectric point, in good
 tained by Nagy and Takács-Nó

Although we show in table
 values for nicotinic acid, a mo
 ment is provided by the calcula
 are derived from the given calcul
 value of -2.078 for lg C_w, and
 the average error between val
 solubility is 0.004, the average
 dard deviation is 0.059 lg units
 of predicting further solubility

We used exactly the same p
 acid, taking E and V as the same
 the solubility data, there is als
 tion of neutral isonicotinic aci
 system [12]. As before, lg C_w w
 to be -3.120 lg units. The resu
 and the calculated and observe
 responding lg C values are in t
 observed values, the average e
 error is 0.034 and the standar
 further predictions of lg C can