

Table 1. Nicotine Transfer To Micro Tar Pyrolysate

Sample Code No.	Description of Sample	Nicotine in tobacco		Nicotine in micro tar		Transfer %
		n*	Mg.nic./0.1 gm. tobacco	n*	Mg.nic./0.1 gm. tobacco burned**	
RL5A	Flue cured, grade D	5	1.66	5	1.25±0.04	75
RL5AB	" " " H2	5	2.16	5	1.71±0.05	79
RL5AB	" " " MF	5	2.15	5	1.71±0.12	80
RL5AF	" " " BF2	5	3.25	5	2.58±0.05	79
<u>Extracted samples (RL5AD)</u>						
25-24	Toluene extracted at 25°C, 3 hrs.	2	1.93	5	1.50±0.04	78
27-28	" " " 45°C, 1 hr.	2	1.74	5	1.38±0.09	78
29-30	" " " 45°C, 3 hrs.	2	1.78	5	1.26±0.12	71
35-36	" " " 65°C, 3 hrs.	2	1.51	5	1.20±0.06	79
46-47	Benzene " " 25°C, 3 hrs.	2	1.28	5	0.99±0.05	77
92	Dioxane " " 65°C, 3 hrs.	2	1.09	5	0.91±0.10	83

* Number of replica determinations

** Confidence limits calculated by the equation $\pm \frac{ts}{\sqrt{n}}$

where n = number of determinations

s = standard deviation

t = probability from Student's "t" tables. See Table 2 for nicotine values for individual replicas.

100086882

Table 2. Nicotine Values For Individual Replicas In Micro-Tar Solutions (See Table 1 for nicotine transfers)

	RL 54	RL 54B	RL 54D	RL 54E	Sample 23-24	Sample 27-28	Sample 29-30	Sample 35-36	Sample 46-47	Sample 92
	1.19	1.66	1.65	2.60	1.49	1.41	1.27	1.27	1.04	0.78
	1.25	1.67	1.82	2.66	1.53	1.41	1.22	1.19	0.95	0.90
	1.23	1.75	1.56	2.60	1.48	1.48	1.23	1.26	1.00	0.91
	1.28	1.72	1.71	2.55	1.55	1.35	1.44	1.16	0.96	1.02
	<u>1.28</u>	<u>1.74</u>	<u>1.81</u>	<u>2.55</u>	<u>1.46</u>	<u>1.26</u>	<u>1.16</u>	<u>1.16</u>	<u>1.06</u>	<u>0.94</u>
Sum (Σx) =	6.24	8.54	8.55	12.96	7.51	6.91	6.32	6.04	5.01	4.55
Mean (\bar{x}) =	1.25	1.71	1.71	2.59	1.50	1.38	1.26	1.21	1.00	0.91
Variance(s^2) =	0.001375	0.001675	0.0121	0.002075	0.001375	0.006775	0.01125	0.002875	0.00235	0.007500
Standard dev (s)	0.0371	0.0409	0.1100	0.0456	0.0371	0.0823	0.106	0.0536	0.0483	0.0865
Coefficient of variance	2.97	2.39	6.41	1.76	2.47	5.96	8.41	4.43	4.83	9.50

00088988