

DOCUMENT 1

Project HINIC

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Objective

To design a Virginia style cigarette at significantly lower tar to nicotine ratios with tar deliveries chosen to match the impact of existing brands delivering 10mg or more tar. (The deliveries will, of course, be lower than the target brand). The overall objective would be to explore all criteria relating to general acceptability of the product, but initially the project will focus on matching impact.

Status

As previously reported, a product made with HINIC II blend (2.5% TVA) with deliveries of 5.1mg PMNF and 0.71 nicotine was found on panel testing to be higher than Silk Cut in impact and nose irritation.

Experiments were then performed to ameliorate the impact by acid treatments. Small samples of HINIC II blend were tested with 1, 2 and 3% of Lactic, Tartaric, Citric and Malic acids and hand made cigarettes evaluated. Expert smokers found Lactic acid caused the greatest amelioration of impact with the lowest distortion of taste on this blend.

Sample cigarettes were then made with HINIC II blend treated with Lactic acid at 0, 1, 2 and 3% and the same construction as used previously. Expert smoking of these samples, ventilated to different levels by bench laser, indicated that 50 - 55% ventilation on between 1 and 2% Lactic acid samples should achieve the desired impact match.

Samples were thus prepared and sent for Omega panel paired comparison test with U.K. Silk Cut KS.

The relevant delivery data on the samples were:

	<u>Silk Cut</u>	<u>C174</u>	<u>C174</u>	<u>C175</u>
Ventilation %	36	50	55	50
Lactic acid %	-	1	1	2
PMNF mg	9.5	6.4	5.7	5.8
Nicotine mg	0.8	0.77	0.71	0.77
CO mg	11.5	5.5	5.2	5.2
Puff No.	9.4	8.3	9.0	8.5

The Omega panel found sample C174 with 55% ventilation to be not significantly different from Silk Cut on mechanics, flavour amplitude, irritation and impact.

Given this match, no further development work is planned under Project HINIC until a commercial application is identified.

However, further samples have been manufactured for smoking behaviour tests to commence on 3 November 1988 and details on this will be presented at the meeting.

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