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THE EFFECT OF ASCORBIC ACID ON NITRIC OXIDE AND  
N-NITROSAMINE DELIVERIES FROM AN AIR-CURED BLEND

(Laboratory Report No. L.583 Restricted)

SUMMARY

Arising from interest in Hoffmann-La Roche patents, tests involving the addition of ascorbic acid and sodium ascorbate, better known as Vitamin C and its sodium salt respectively, to an air-cured tobacco blend have been made. These show that the treatment causes little or no reduction in the deliveries of nitric oxide and N-nitrosamines. Although aqueous solutions are known to be unstable with time, when ascorbic acid is applied to tobacco the degradation rate appears to be increased slightly, possibly due to the high surface area and humidity. The present work suggests that the use of ascorbic acid and sodium ascorbate as additives for either nitric oxide or N-nitrosamine delivery reductions is impracticable due to their ready decomposition in the presence of tobacco.

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