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APPLICATION NOTE

PYROLYSIS

CAPILLARY GAS CHROMATOGRAPHY ANALYSIS OF SOME MODERN PAINT FINISHES

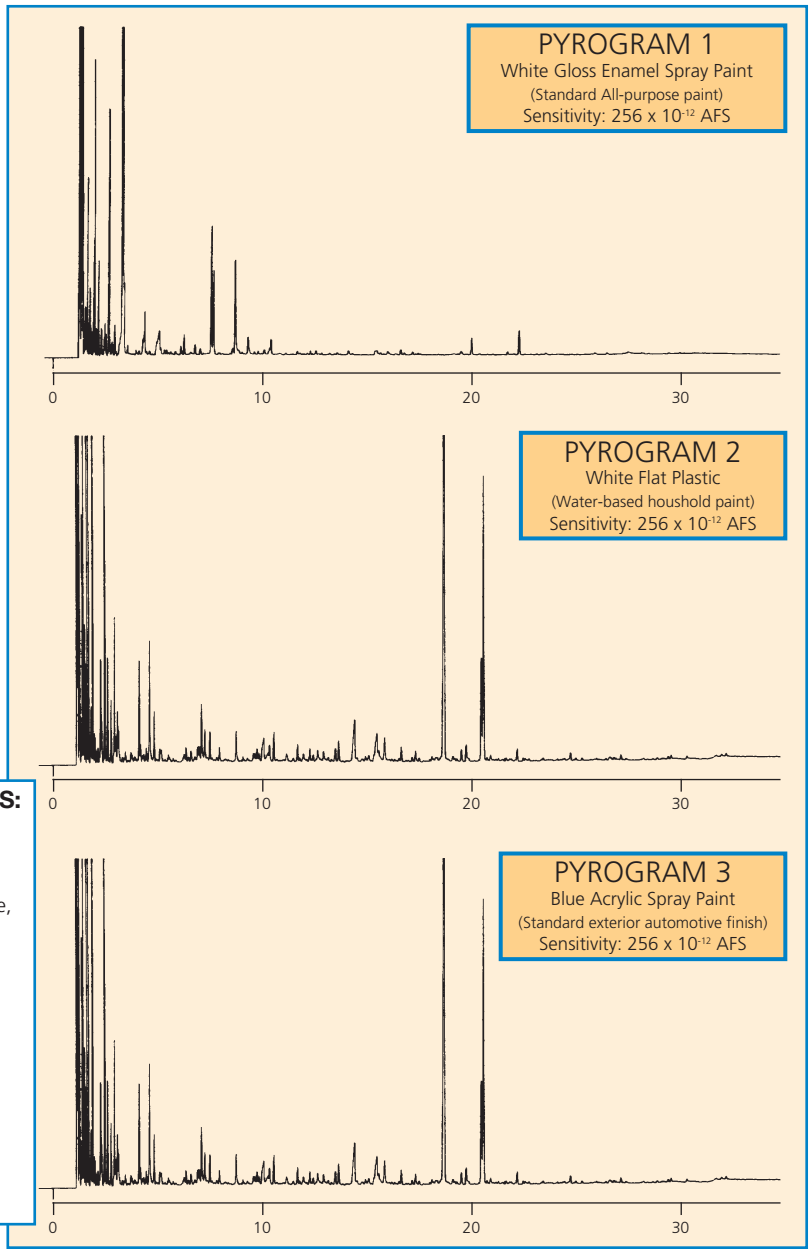
INTRODUCTION

Capillary gas chromatographic profiles of three commercially available paint finishes were obtained by a simple and rapid pyrolysis technique.

The samples run were a water based flat white plastic paint (houshold use), a white, gloss enamel (all purpose style) and a blue, acrylic paint (used in automotive industry). Sample preparation was simple using an SGE sample "Pelletiser P-1" and a "Solids Injector" system.

Results exhibit excellent reproducibility and extremely high sensitivity.

All samples were run under the following conditions.



INSTRUMENTATION AND CONDITIONS:

Pyrolysis Temp.:	800°C
Column:	25QC3/BP1/0.5, 25m, 0.32mm ID
Stationary Phase:	Crosslinked methyl silicone, BP1
Film thickness:	0.5 micron
Initial Temp.	50°C for 2min
Program Rate:	5°C/min
Final Temp.:	200°C for 10min
Detector:	Flame Ionization
Carrier Gas:	Hydrogen
Linear Carrier Velocity:	35cm/sec @ 50°C
Split Ratio:	100:1
Injection Mode:	Pyrolysis Split

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