

Methods of Fire Debris Preparation for Detection of Accelerants

REFERENCE: Caddy B, Smith FP, Macy J: Methods of fire debris preparation for detection of accelerants; *Forensic Sci Rev* 3:57-69; 1991.

ABSTRACT: Forensic scientists use various techniques to separate accelerants from fire debris samples before instrumental identification of added fuels. Among the choices available, traditional micro-distillation, steam distillation, vacuum distillation, headspace, heated headspace, and several vapor adsorption/desorption methods provide various advantages and disadvantages. This communication reviews the development of these techniques from the 1950s and comparison studies performed.

KEY WORDS: Accelerants, criminalistics, fire debris, trace evidence.