

Environmental Organochlorine Pesticides



www.dps-instruments.com

Organochlorine pesticides, such as DDT, have a long history of widespread use around the world. These compounds have been used as insecticides since the 1940's are typically very persistent in the environment, and are known for accumulating in sediments. plants and animals. Organochlorine pesticides have a wide range of both acute and chronic health effects, including cancer. neurological damage, and birth defects. The DPS Pesticides GC Analyzers are configured using the nonradioactive BCD detector to identify these pesticides in food and other products in the part per billion (ppb) range. The BCD requires only helium to operate. The fast heating and rapid cooling column oven in every DPS GC vastly increases your sample throughput and adding a second column and detector allows you to perform primary and conformational analyses with one injection. The fully integrated Pesticides GC Analyzer systems are small and lightweight and all DPS systems are modular for expandability, upgrades, and easy service.



Available Configurations Include:

- 600-C-130 Series 600 Organochlorine Pesticide GC Analyzer (BCD, 30m) 600-C-131 - Series 600 Dual Column Organochlorine Pesticide GC Analyzer (BCD, BCD, 2 x 30m)
- 500-C2-130 Companion 2 Portable Organochlorine Pesticide GC Analyzer (BCD, 30m)



Series 600 GC

Chlorinated Pesticides with BCD - 200 ng 200 ng CL-Pest BCD 300.00 **BCD** Detector Detector Temperature = 300C Cell Temperature = 875C <u>Area</u> 523.5 366.9 Peak $\frac{\text{Component}}{\alpha - \text{BHC}}$ BHC Gain = 2 2 3 4 5 6 7 8 9 10 11 12 13 4 15 16 γ-BHC β-BHC 506.9 506.2 174.4 690.6 Collector = -100U Carrier = Helium @ 120 kPa Column = 30m x 0.53 MXT-1 δ-ΒΗΟ Heptachlor Aldrin Heptachlor Epoxide 331.4 831.1 Temperature Program = 180C (hold 1 min) to 280C @ 10C/min Chlordane 578.3 Endosulfan I 512.4 475.9 433.7 327.9 4,4,-DDE Dieldrin Endrin 4,4,-DDD 4,4,-DDT Endosulfan Sulfate 241.3 209.7 165.7 103.2 Methoxyxhlor 1219.4 Endrin Ketone **Companion 2 Portable GC** -50.00 22.000 0.000