

### Designed for ACGIH TLVs with IFV Designation

- True inhalable fraction and vapor sampling simultaneously
  - Collects aerosol phase on a 25-mm filter using IOM-style inlet
  - Collects vapor in an 8 x 110-mm sorbent tube
  - Applications and media are shown in Selection Guide (see right).
- Recommended 1 L/min flow rate allows for effective collection of both contaminant phases
- Meets European Standard 13936 by collecting the total of vapor and aerosol exposures

SKC introduces the IFV Pro Sampler for collecting mixed-phase contaminants such as pesticides, polyaromatic hydrocarbons (PAHs), inorganic acids, and explosives. Sampling mixed-phase contaminants is challenging because these compounds exert sufficient vapor pressure that they may be present in both particulate and vapor phases with each contributing to the overall concentration. IFV Pro features an IOM-style inlet for true inhalable sampling and collects vapor phase on a variety of method-specific sorbents. *See compounds, filters, and sorbent tubes at right*.

#### **ACGIH IFV Designation**

ACGIH<sup>®</sup> has assigned a TLV<sup>®</sup> with Inhalable Fraction and Vapor (IFV) designation to over 50 compounds (*see table at right*) that exert sufficient vapor pressure such that the contaminant may be present in both particle and vapor phases, with each phase contributing a significant portion of the dose.



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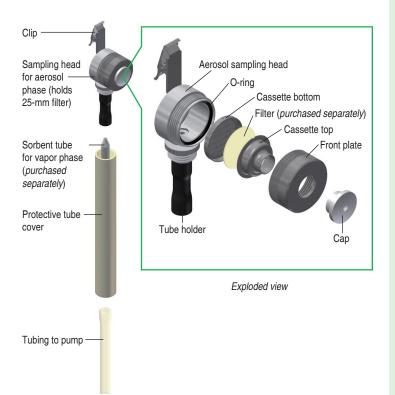


## IFV Pro Filter and Sorbent Tube Selection Guide

	Recommended	Sorbent
Compound	Filter	Tube
Acrylamide	225-702	226-10-04
Alachlor	225-702	226-30-06
Aldrin	225-702	226-30-06
Azinphos-methyl	225-702	226-30-06
Butylated hydroxytoluene	225-702	226-211
Carbaryl	225-702	226-30-06
Carbofuran	225-702	226-30-06
Chlorpyrifos	225-702	226-30-06
Clopidol	225-702	226-30-06
Coumaphos	225-702	226-30-06
Cresol, all isomers	225-702	226-211
Demeton	225-702	226-30-06
Demeton S-methyl	225-702	226-30-06
Diazinon	225-702	226-30-06
Dibutyl phosphate	225-702	226-30-06
Dichlorvos	225-702	226-30-06
Dicrotophos	225-702	226-30-06
Dieldrin	225-702	226-30-06
Diesel fuel as total hydrocarbons	225-702	226-09
Diethanolamine	225-702	226-214
Dioxathion	225-702	226-30-06
Disulfoton	225-702	226-30-06
Endosulfan	225-702	226-30-06
2-Ethylhexanoic acid	225-702	226-10-04
Fenamiphos	225-702	226-30-06
Fensulfothion	225-702	226-30-06
Fenthion	225-702	226-30-06
Fonofos	225-702	226-30-06
Glyoxal	225-9036	226-119-7
Malathion	225-702	226-30-06
Maleic anhydride	225-9028	226-213
Methomyl	225-702	226-30-06
Methyl demeton	225-702	226-30-06
Methyl parathion	225-702	226-30-06
Mevinphos	225-702	226-30-06
Monochloroacetic acid	225-702	226-10-04
Monocrotophos	225-702	226-30-06
Naled	225-702	226-30-06
o-Phthalodinitrile	225-702	226-83
Parathion	225-702	226-30-06
Pentachlorophenol	225-702	226-211
Phorate	225-702	226-30-06
Propoxur	225-702	226-30-06
Ronnel	225-702	226-30-06
Sulfotepp	225-702	226-30-06
Sulprofos	225-702	226-30-06
Temephos	225-702	226-30-06
Terbufos	225-702	226-30-06
1,1,2,2-Tetrabromoethane	225-702	226-10-04
Tetraethylpyrophosphate (TEPP)	225-702	226-106A
Thiram	225-702	226-30-06
Toluene-2,4-diisocyanate	225-9035	
Toluene-2,6-diisocyanate	225-9035	_
Xylidene isomers	225-702	226-10-04

## **SKC IFV Pro Sampler**

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# Sampling Mixed-phase Contaminants Using IFV Pro

- 1. **Aerosol phase** Place cassette loaded with 25-mm filter in sampling head.
- 2. **Vapor phase** Insert opened sorbent tube into tube holder on sampling head.
- 3. **Simultaneous sampling** Attach tubing to sorbent tube, put protective tube cover in place, attach tubing to sample pump, and sample!

### **Performance Profile**

Flow Rate: 1 L/min

**50% Cut-point:** 100 μm at 1 L/min inhalable fraction

Material:

Sampling Head Stainless steel front plate and filter

cassette with 10.6-mm dia. inlet\*; aluminum clip, housing, and outlet

**Tube Holder** Black rubber

**Protective** 

**Tube Cover** Plastic

Maximum Operating

**Temperature:** 392 F (200 C) suitable for autoclaving and

solvent washing

**Filters:** 25-mm glass fiber or quartz filter; or coated

filter. Dependent upon compound of interest. See Selection Guide on reverse side.

**Sorbent Tubes:** 8 x 110-mm size. Dependent upon compound

of interest.

See Selection Guide on reverse side.

Tubing: ¼-inch ID

**Weight**: 2.4 oz (68 gm)

**Dimensions**: 8.5 x 1.2 in (21.6 x 3.17 cm)

#### **Ordering Information**

Description	Cat. No.
IFV Pro Sampler includes sampling head (aerosol sampler	
body, cassette, and front plate), protective tube cover,	
cassette cap, 10 extra tube holders (rubber sleeves), and	
cassette transport container, requires 25-mm filter and	
sorbent tube	225-49
IFV Pro Sampler Kit includes sampler as described above	),
calibration adapter, and case, requires 25-mm filter and	
sorbent tube	225-49K
Filter Cassette, stainless steel, with cap and transport	
container, for 25-mm filter	225-4903
Tube Holders (Rubber Sleeves), pack of 25, change after	
each sample	P3022A
IFV Pro Cassette Transport Vial	225-4901
Accessory	
Calibration Adapter	225-361



<sup>\*</sup> Designed to meet the inhalable convention based on the scaling down technique described in the Final Report on research carried out under NIOSH-CDC Grant No. RO1-OH 03687-03, "Development of New Personal Aerosol Samplers," Vincent, J.H., et al., 2003.