

# SAMPLING SOLUTIONS

### For Petroleum Refineries

## Recognition

Through the many chemical processes involved in converting raw material and crude oil into various products, workers may be exposed to compounds that present health and safety hazards. SKC offers solutions for active and passive sampling in workplace air. SKC active samplers require an air sample pump to collect hazardous gases, vapors, and particulates in air; passive samplers collect hazardous vapors by diffusion without the use of an air sample pump.

#### See the SKC equipment recommended for sampling the following compounds:

- Hydrogen sulfide
- Sulfuric and hydrofluoric acids
- Benzene, ethyl benzene, toluene, xylene, and other VOCs
- Polynuclear aromatic hydrocarbons (PAHs)
- Sulfur dioxide

For passive benzene fenceline monitoring, see Publication 1849.

# **Evaluation with SKC Sampling Solutions**

For over 50 years, SKC has led the research, design, and manufacture of quality sampling equipment and media to aid health and safety professionals in the evaluation of occupational and environmental hazards.

Choose from the many SKC sampling solutions for petroleum refineries, including air sample pumps, active and passive samplers, filter cassettes, and sorbent tubes following agency methods and established protocols.

See reverse side for specific method and sampling equipment/media information.

## **Sample Collection**

## **Active Air Sampling Solutions**

Target Compound	Select Methods*	SKC Sample Collection Media and Cat. No.	SKC Sample Pump and Cat. No.	Notes
Acids (hydrofluoric and sulfuric)		Preloaded coated filter cassette <u>225-9001</u>	AirChek® TOUCH 220-5000TC	For hydrofluoric acid
	NIOSH 7908	Preloaded coated filter cassette 225-9033	AirChek TOUCH 220-5000TC	For sulfuric acid Use with thoracic Parallel Particle Impactor (PPI) 225-381 for comparison to thoracic TLV.
	OSHA ID 113	Preloaded filter cassette 225-3-01 OR Preloaded thoracic PPI sampler 225-3861	AirChek TOUCH 220-5000TC	For sulfuric acid For comparison to thoracic TLV
	OSHA ID 165SG	Sorbent tube 226-10-03	Pocket Pump TOUCH 220-1000TC or AirChek TOUCH 220-5000TC	For sulfuric acid
Benzene, ethyl benzene, toluene, xylene, and other VOCs	NIOSH 1501 OSHA 7 OSHA 12 OSHA 1002 OSHA 1005	Sorbent tube 226-01	Pocket Pump TOUCH 220-1000TC or AirChek TOUCH 220-5000TC	
Hydrogen sulfide	OSHA 1008	Sorbent tube <u>226-177</u>	Pocket Pump TOUCH 220-1000TC or AirChek TOUCH 220-5000TC	
PAHs	NIOSH 5506 NIOSH 5515	Preloaded filter cassette 225-1713 with sorbent tube 226-30-04	AirChek TOUCH 220-5000TC	
Sulfur dioxide	OSHA 1011	Sorbent tube <u>226-177</u>	Pocket Pump TOUCH 220-1000TC or AirChek TOUCH 220-5000TC	

## **Passive Air Sampling Solutions**

Target Compound	Select Methods*/ SKC Validation	SKC Sample Collection Media and Cat. No.	Notes
, ,	OSHA 1002 OSHA 1005	VOC Chek <sup>®</sup> <u>575-001</u> or <u>575-002</u>	
xylene, and other VOCs	Research Reports <u>1312</u> and <u>1812</u>		

<sup>\*</sup> Other methods may apply. SKC recommends those listed.

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