



*The Hong Kong University of Science & Technology  
Health, Safety and Environment Office  
Laboratory*

*Industrial Hygiene / IAQ Analysis  
(Air Samples)*

*Test Catalogue & Fee Schedule (USD)*

*March 2025*

Clear Water Bay,  
Kowloon, Hong Kong

Website: <https://hseo.ust.hk/hseo-lab>

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## QUALIFICATIONS AND ACCREDITATIONS

Health, Safety and Environment Office (HSEO) Laboratory operates according to the guidelines set out in ISO/IEC 17025 - “General requirements for the competence of testing and calibration laboratories”. It has received accreditation from the American Industrial Hygiene Association (AIHA) since 1996 and from the Hong Kong Laboratory Accreditation Scheme (HOKLAS) since 1999. Our laboratory employs a comprehensive quality control program covering both sample preparation and analysis.

Major instrumentation and techniques include:

- AIHA Accreditation (LAP-102243)
  - Chromatography Core
    - Gas Chromatography (GC/FID)
    - High Performance Liquid Chromatography (HPLC/UV)
    - Ion Chromatography (IC)
  - Spectrometry Core
    - Inductively Coupled Plasma Optical Emission Spectroscopy (ICP/OES)
    - Inductively Coupled Plasma Mass Spectroscopy (ICP/MS)
  - Miscellaneous Core
    - Gravimetric
- HOKLAS Accreditation (HOKLAS094)
  - Microbiological Analysis

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## TERMS & CONDITIONS

(Refer to HSEO Lab website)

<https://hseo.hkust.edu.hk/hseo-lab/service>

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## INDUSTRIAL HYGIENE ANALYSES

### METALS BY ICP

#### MCE / PVC FILTERS:

<u>Method Code</u>	<u>Method Reference</u>	<u>Instrumentation</u>	<u>Detection Limit</u>
PAM001	NIOSH 7301, 7303	ICP/OES	mg/sample
PAM026	NIOSH 7300	ICP/MS	µg/sample

#### Analyte List:

						<u>Fee (USD)</u>
Aluminum, Al	Antimony, Sb <sup>#</sup>	Arsenic, As <sup>#</sup>	Barium, Ba	Beryllium, Be	Boron, B	45 / 20 *
Cadmium, Cd	Chromium, Cr	Cobalt, Co	Copper, Cu	Indium, In	Iron, Fe	
Lead, Pb	Manganese, Mn	Nickel, Ni	Mercury, Hg <sup>#</sup>	Selenium, Se <sup>#</sup>	Silver, Ag	
Titanium, Ti	Vanadium, V	Zinc, Zn				

<sup>#</sup> Analyzed by ICP/MS only.

**Special discount: USD 1,250 for any 8 analytes from above list per sample**

<u>Metal</u>	<u>Method Code</u>	<u>Method Reference</u>	<u>Instrumentation</u>	<u>Sampling Medium</u>	<u>Fee (USD)</u>
Lead in Paint	PAM004 <sup>^</sup>	ASTM E1645-94	ICP/OES	-	58
Lead in Wipe	PAM018 <sup>^</sup>	HUD-1539-LBP / NIOSH 9100	ICP/OES	Baby wipe paper	58

### PARTICULATE (NUISANCE DUST / OIL MIST)

<u>Analyte</u>	<u>Method Code</u>	<u>Method Reference</u>	<u>Instrumentation</u>	<u>Sampling Medium</u>	<u>Fee (USD)</u>
Total Particulates	PAM017	NIOSH 0500	Gravimetric	SKC 225-8-01 (single filter) / SKC 225-8202 (Matched-weight filter)	16
Respirable Particulates	PAM017	NIOSH 0600	Gravimetric		16
Inhalable / Respirable Particulates	PAM025	HSE MDHS 14/3	Gravimetric	SKC 225-70A, 25mm (IOM Sampler)	29

### ANALYTES BY IC

<u>Method Code</u>	<u>Method Reference</u>	<u>Instrumentation</u>	<u>Sampling Medium</u>	<u>Fee (USD)</u>
PAM010	NIOSH 7903	IC	SKC 226-10-03	52 / 20 *

#### Analyte List:

Hydrobromic acid (HBr)	Hydrofluoric acid (HF)	Phosphoric acid (H <sub>3</sub> PO <sub>4</sub> )
Hydrochloric acid (HCl)	Nitric acid (HNO <sub>3</sub> )	Sulfuric acid (H <sub>2</sub> SO <sub>4</sub> )

**Special discount: USD 1,000 for complete analyte list per sample**

<u>Analyte</u>	<u>Method Code</u>	<u>Method Reference</u>	<u>Instrumentation</u>	<u>Sampling Medium</u>	<u>Fee (USD)</u>
NaF as F	PAM021 <sup>^</sup>	NIOSH 7906	IC	SKC 225-9001	52
NO <sub>2</sub>	PAM024	OSHA ID-182	IC	Ogawa Passive Sampler	52
Ammonia	PAM030	NIOSH 6016	IC	SKC 226-10-06	52

\* First analyte on a sample / additional analyte on same sample

## ORGANIC SOLVENTS BY GC/FID

(For analyte not on the list, please contact us for details.)

<u>Method Code</u>	<u>Method Reference</u>	<u>Instrumentation</u>	<u>Sampling Medium</u>	<u>Fee (USD)</u>
PAM002	OSHA / NIOSH methods	GC/FID	Sorbent tube	52 / 20 *
PAM015	OSHA / NIOSH methods	GC/FID	Assay Technology 566 OVM	52 / 20 *
<u>Analyte List:</u>		<u>Method Reference</u>	<u>Sorbent tube</u>	<u>Passive sampler</u> (AT566 OVM)
Acetic acid		NIOSH 1603	Anasorb CSC, SKC 226-01	-
Acetone		NIOSH 1300	Anasorb CSC, SKC 226-01	✓
Acetonitrile		NIOSH 1606	Anasorb CSC, SKC 226-09	✓
1-Butanol		NIOSH 1401	Anasorb CSC, SKC 226-01	✓
n-Butyl Acetate		NIOSH 1450	Anasorb CSC, SKC 226-01	✓
Butyl Acrylate		OSHA PV2011	Anasorb CSC, SKC 226-01	✓
Carbon disulfide		NIOSH 1600	Anasorb CSC, SKC 226-01	-
Carbon Tetrachloride		NIOSH 1003	Anasorb CSC, SKC 226-01	✓
Chlorobenzene		NIOSH 1003	Anasorb CSC, SKC 226-01	✓
Chloroform		NIOSH 1003	Anasorb CSC, SKC 226-01	✓
Cyclohexane		NIOSH 1500	Anasorb CSC, SKC 226-01	✓
1,2-Dichloroethane (Ethylene dichloride)		NIOSH 1003	Anasorb CSC, SKC 226-01	✓
Dichloromethane (Methylene chloride)		NIOSH 1005	Anasorb CSC, SKC 226-01	✓
Diethyl ether (Ethyl ether)		NIOSH 1610	Anasorb CSC, SKC 226-01	✓
Ethanol (Ethyl alcohol)		NIOSH 1400	Anasorb CSC, SKC 226-01	✓
Ethyl Acetate		NIOSH 1457	Anasorb CSC, SKC 226-01	✓
Ethyl Benzene		NIOSH 1501	Anasorb CSC, SKC 226-01	✓
Ethyl Lactate		OSHA PV2081	Anasorb CSC, SKC 226-01	✓
n-Heptane		NIOSH 1500	Anasorb CSC, SKC 226-01	✓
n-Hexane		NIOSH 1500	Anasorb CSC, SKC 226-01	✓
Isoflurane		OSHA 103	Anasorb 747, SKC 226-81A	✓
Methanol		NIOSH 2000	Silica gel, SKC 226-51	✓
Methyl Ethyl Ketone (MEK)		NIOSH 2500	Anasorb CMS, SKC 226-121	✓
Methyl Isobutyl Ketone (MIBK)		NIOSH 1300	Anasorb CSC, SKC 226-01	✓
Methyl Methacrylate		NIOSH 2537	XAD-2, SKC 226-30-06	✓
Methyl tert-Butyl Ether (MTBE)		NIOSH 1615	Anasorb CSC, SKC 226-37	✓
1-Methyl-2-Pyrrolidinone (NMP)		NIOSH 1302	Anasorb CSC, SKC 226-01	✓
Phenol		NIOSH 2546	XAD-7, SKC 226-95	✓
Phenyl Ether		NIOSH 1617	Anasorb CSC, SKC 226-01	✓
2-Propanol (Isopropanol)		NIOSH 1400	Anasorb CSC, SKC 226-01	✓
Propylene glycol methyl ether		NIOSH 2554	Anasorb 747, SKC 226-81A	✓
Pyridine		NIOSH 1613	Anasorb CSC, SKC 226-01	✓
Styrene		NIOSH 1501	Anasorb CSC, SKC 226-01	✓
Tetrahydrofuran		NIOSH 1609	Anasorb CSC, SKC 226-01	✓
Tetrachloroethylene (Perchloroethylene)		NIOSH 1003	Anasorb CSC, SKC 226-01	✓
Toluene		NIOSH 1501	Anasorb CSC, SKC 226-01	✓
1,1,1-Trichloroethane		NIOSH 1003	Anasorb CSC, SKC 226-01	✓
Trichloroethylene		NIOSH 1022	Anasorb CSC, SKC 226-01	✓
Vinyl acetate		NIOSH 1453	Carbon molecular sieve, 160mg/80mg	✓

\* First analyte on a sample / additional analyte on same sample

### OTHER ORGANIC SOLVENTS BY GC/FID

<u>Analyte</u>	<u>Method Reference</u>	<u>Sorbent tube</u>	<u>Passive sampler</u>	<u>Fee (USD)</u>
Benzene	NIOSH 1501	Anasorb CSC, SKC 226-01	AT566 OVM	65
Xylenes	NIOSH 1501	Anasorb CSC, SKC 226-01	AT566 OVM	65
Formaldehyde	NIOSH 2541	XAD-2, SKC 226-118	-	65
Total Hydrocarbons (as Hexane)	NIOSH 1500	Anasorb CSC, SKC 226-01	AT566 OVM	65

### ORGANIC SCAN BY GC/MSD

<u>Analyte</u>	<u>Method Code</u>	<u>Sorbent tube</u>	<u>Sampling Medium</u>	<u>Fee (USD)</u>
Low/High Boiling Fraction	PAM006^	Anasorb CSC, SKC 226-01	AT566 OVM	39 for each / 65 for both
Organic Scan	PAM032^	-	Thermal desorption tube	39

### FORMALDEHYDE BY HPLC

<u>Analyte</u>	<u>Method Code</u>	<u>Method Reference</u>	<u>Sampling Medium</u>	<u>Fee (USD)</u>
Formaldehyde	PAM023	NIOSH 2016	SKC 500-100 OVM / SKC 226-119	65

### MICROBIOLOGICAL ANALYSIS

<u>Analyte</u>	<u>Method Code</u>	<u>Method Reference</u>	<u>Sampling Medium</u>	<u>Fee (USD)</u>
Airborne Bacteria Count (uncorrected number of colonies on agar plate)	PAM027	AIH (1) 4/86, ACGIH, TSA, 30°C for 2 days	Tryptic Soy Agar	39
Airborne Molds & Yeasts (uncorrected number of colonies on agar plate)	PAM028	AIH (1) 4/86, ACGIH, MEA, 25°C for 5 days	Malt Extract Agar	39

## SAMPLING MEDIA

<b>SORBENT TUBES &amp; FILTERS</b>				
<u>Cat. No.</u>	<u>Description</u>	<u>Treated</u>	<u>Sorbent (mg)</u>	<u>Unit Cost (USD)</u>
225-3-01	SKC MCE filter, 37mm, 0.8µm, clear, 3 piece	No	-	3
225-8202	SKC PVC matched-weight filter, 37mm, 5µm , 3 piece	No	-	9
226-01	SKC Anasorb CSC, Coconut charcoal **	No	50 / 100	2
226-10-06	SKC Silica gel (Sulfuric Acid) **	Yes	100 / 200	7

<b>ORGANIC VAPOR MONITORS</b>			
<u>Cat. No.</u>	<u>Description</u>	<u>Treated</u>	<u>Unit Cost (USD)</u>
AT566	Assay Technology 566 Organic Vapor Monitor **	No	21
500-100	SKC UMEx 100 Organic vapor monitor for formaldehyde **	Yes	30
PS-134	Ogawa passive sampler filter for NO <sub>2</sub> **	Yes	9

- Note:
- 1) Methods marked with ^ are outside the scope of accreditation of the laboratory.
  - 2) \*\* Limited shelf-life
  - 3) All media is subject to availability and may require a minimum order.
  - 4) Prices are subject to change without notice.

**- END -**