

# LCS Laboratory Inc.

Accredited by AIHA LAP to ISO 17025-2017 standards

## 2026 Laboratory Price List



700 Collip Circle, Unit 218

London, Ontario, N6G 4X8

Phone: (519) 777-5232

Email: [info@lcslaboratory.com](mailto:info@lcslaboratory.com)

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## Introduction

The 2025 price list is divided into several sections: Air Sampling Tests, Air Sampling Scans, Rental Equipment, Surface Tests, Microscopy, SDS and GHS tests, Miscellaneous tests. The price that you see below includes sampling tubes or filters, laboratory analysis, and a laboratory report.

## Turn Around Time (TAT) and rush services

Our standard TAT is **10 business days**. The service time is calculated from the time we received your samples. Usually, 1-6 day expedited service is available. The same-day service must be booked in advance and the samples should be delivered by 11 AM. Please call us at (519) 777-5232 to make sure that we can accommodate your emergency project. The following surcharges will be added to the cost of rush orders:

TAT	Same day. by 5PM	1-(next) business day by 5PM	2 business days	3 business days	4 business days	6 business days	10 business days
<b><u>Additional</u></b> Surcharge	150%	100%	75%	50%	30%	20%	0%

## Chain of Custody (CoC) form

Request for Analysis form is available for download from our [website](#).

## Reports.

We send signed laboratory reports by email in Adobe PDF format. All reports are confidential and sent only to a person designated on the CoC form

## Shipping and Handling

**Domestic letters and parcels (within Canada)**. We accept shipping by Canada Post, FedEx, Purolator, UPS and any other Courier Company. When you use Canada Post, please use the “**no signature required**” option. Your parcel is delivered to our mail room and is safe there.

**International letters and parcels (to Canada)**. We accept shipping by USPS, FedEx, and DHL. **WE DO NOT ACCEPT UPS DELIVERIES**. Please use ground shipping, because some samples are not safe for Air Services. Please email us the tracking number with a short message about your order. Please be careful when you prepare shipping papers, incorrect papers may delay the delivery. Your courier will ask:

- Goods description: describe what you are sending, like “sample of plaster for testing” or “Vermiculite for testing”
- Cost of goods: Your sample has no commercial value, please put a cost of \$1. If you need to put any other cost, please be aware that we will be charged border duties and taxes and we will reject shipping.
- If you have an account with a courier company, please select “taxes and duties are paid by sender”, this will accelerate the border transition. We will reject the samples if we are asked to pay the duties.

**To deliver in person:** Please leave samples in the Sample Drop Box located in the entrance lobby. We collect samples from the Drop Box every hour.

### **AIHA LAP Accreditation**

Our laboratory complies with the ISO 17025-2017 standard for testing laboratories. We participate in 8 rounds of external proficiency tests annually. We are accredited by American Industrial Hygiene Association Laboratory Accreditation Program (AIHA LAP) for Industrial Hygiene testing and Bulk Asbestos analysis. Our current certificate of accreditation is available from AIHA web site.

### **Currency and payments.**

All rates are in Canadian Dollars.

Canadian clients can pay with cheque, cash, Interac e-transfer, and credit cards (processing fee may be added to manually processed credit cards).

Clients in the US and International clients can pay with cheque, wire transfer, or ACH e-transfer.

### **Subcontract work.**

LCS Laboratory subcontracts several tests to ISO 17025 accredited laboratories in Canada. Such tests are identified in the price list with superscript <sup>(s)</sup>

## Single-component air testing for Industrial Hygiene

This section includes available tests of air samples collected on tubes or filters according to standard sampling procedures. **All prices are shown for the orders of 2 or more samples.** Price includes sampling media (**except Diffusive Samplers**), analysis and reporting. Media Type and Air Volume are provided for guidance only. Please use Reporting Limit value to estimate target air volume for your project.

Compound ID	Method #	Media	Air Volume L	RL (µg)	Rate C\$
Abietic Acid	SOP (HPLC UV)	PTFE	200–1000	5	100
Acetaldehyde	NIOSH 2018	DNPH-SG	1–15	0.5	100
Acetone	NIOSH 1300	CSC	0.5–3	10	60
Acetonitrile	NIOSH 1606	CSC	1–25	15	60
Acrolein (qualitative)	NIOSH 2018 <sup>WM</sup>	DNPH-SG	1–15	0.2	100
Alkaline Dust (Analysed as Na and reported as NaOH)	NIOSH 7301	MCE	480–960	100	60
Aluminium <sup>S</sup>	NIOSH 7301	MCE	5–100	2	60
Ammonia	NIOSH 6015	SG treated	0.1–96	5	75
Amyl Acetate (n-)	NIOSH 1450	CSC	1–10	10	60
Amyl Acetate (sec-)	NIOSH 1450	CSC	1–10	10	60
Anisidine (o-)	NIOSH 2514	XAD-2	24–320	0.5	100
Antimony <sup>S</sup>	NIOSH 7301	MCE	50–2000	1	60
Arsenic <sup>S</sup>	NIOSH 7301 <sup>WM</sup>	MCE	5–2000	1	60
Asbestos Fibers in air (total fiber count)	NIOSH 7400	PCM	400–1000	3000 ff	30
Asbestos Fibers in air (differential counting)	OSHA ID 160	PCM	25–2400	3000 ff	30
Asphalt Fume (see “Benzene soluble”)	-	-	-	-	-
Benzene	NIOSH 1501	CSC	20–40	3	60
Benzene Soluble Fraction	NIOSH 5042	PTFE	1000-2000	100	75
Beryllium <sup>S</sup>	NIOSH 7301	MCE	1250–2000	0.1	60
Bromoethane; (Ethyl Bromide)	NIOSH 1011	CSC	0.5–4	15	60
Bromoform	NIOSH 1003	CSC	4–70	15	60
Bromopropane (1-)	NIOSH 1025	CSC	3–12	15	60
Butane	OSHA 2010 <sup>WM</sup>	CSC	1-3	10	60
Butoxyethanol (2-)	NIOSH 1403	CSC	2–10	10	60
Butoxyethyl Acetate (2-)	OSHA 83	CSC	10-50	10	60

Compound ID	Method #	Media	Air Volume L	RL (µg)	Rate C\$
Butyl Acetate (n-)	NIOSH 1450	CSC	1–10	10	60
Butyl Acetate (sec-)	NIOSH 1450	CSC	1–10	10	60
Butyl Acetate (tert-)	NIOSH 1450	CSC	1–10	10	60
Butyl Alcohol (n-)	NIOSH 1401	CSC	2–10	10	60
Butyl Alcohol (sec-), Butanol-2	NIOSH 1401	CSC	2–10	10	60
Butyl Alcohol (tert-)	NIOSH 1400	CSC	1.0–10	10	60
Cadmium <sup>S</sup>	NIOSH 7301	MCE or PVC	200–2000	2	60
Butyl Catechol (tert-)	OSHA PV 2014 <sup>WM</sup>	OVS-7	10–20	5	110
Calcium <sup>S</sup>	NIOSH 7301	MCE or PVC	2–2000	2	60
Carbon Black	OSHA ID 196 <sup>WM</sup>	PVC	480–960	100	70
Carbon Elemental, see Diesel Particulates	-	-	-	-	-
Carbon Tetrachloride	NIOSH 1003	CSC	3–150	15	60
Cellulose Fibers	NIOSH 7400	PCM	100–1000	3000 ff	30
Charcoal	NIOSH 5000	PVC	30–570	100	75
Chlorobenzene	NIOSH 1003	CSC	1.5–40	15	60
Chloroethane	NIOSH 2519	CSC	1–3	15	60
Chloroform	NIOSH 1003	CSC	1–50	15	60
Chromium <sup>S</sup>	NIOSH 7301	MCE	100–1000	2	60
Chromium, Hexavalent, soluble fraction	NIOSH 7600	PVC	500–1000	0.5	75
Coal Dust (as loss on ignition)	NIOSH 5000	PVC	30–570	100	75
Coal Tar Pitch Volatiles (see Benzene Soluble)	-	-	-	-	-
Cobalt <sup>S</sup>	NIOSH 7301	MCE	25–2000	2	60
Coke Oven Emission (see Benzene Soluble)	-	-	-	-	-
Copper <sup>S</sup>	NIOSH 7301	MCE	5–1000	2	60
Cresol	NIOSH 2546	XAD-7	1–24	10	60
Cumene	NIOSH 1501	CSC	120–480	5	60
Cyclohexane	NIOSH 1500	CSC	2.5–5	5	60
Cyclohexanol	NIOSH 1402	CSC	1–10	10	60
Cyclohexanone	NIOSH 1300	CSC	1–3	10	60
Decane	NIOSH 1500	CSC	2–4	5	60

Compound ID	Method #	Media	Air Volume L	RL (µg)	Rate C\$
Diacetone Alcohol	NIOSH 1402	CSC	1–10	10	75
Dibutyl Phthalate	NIOSH 5020	MCE	6–200	15	75
Dichlorobenzene (o-)	NIOSH 1003	CSC	1–10	15	60
Dichlorobenzene (p-)	NIOSH 1003	CSC	1–8	15	60
Dichloroethane (1,1-)	NIOSH 1003	CSC	1–15	15	60
Dichloroethane (1,2-)	NIOSH 1003	CSC	1–50	10	60
Dichloroethylene (1,2-)	NIOSH 1003	CSC	1–5	15	60
Dichloromethane	NIOSH 1005	CSC	1–3	10	60
Diesel Particulates <sup>s</sup>	NIOSH 5040	QF	200–1000	3	120
Diethyl Ether	NIOSH 1610	CSC	0.25–3	10	60
Diethylene Glycol	NIOSH 5523	XAD-7	5–60	20	75
Diethylene Glycol Monoethyl Ether	OSHA PV2013	CSC	10	20	60
Diisobutyl Ketone	NIOSH 1300	CSC	1–10	10	60
Dioxane (1,4-)	NIOSH 1602	CSC	0.5–15	10	60
Dipropylene Glycol Methyl Ether	OSHA 101	CSC	10	15	60
Ethoxyethanol (2-)	NIOSH 1403	CSC	1–6	10	60
Ethoxyethyl Acetate (2-)	NIOSH 1450	CSC	1–10	10	60
Ethyl Acetate	NIOSH 1457	CSC	0.1–10	10	60
Ethyl Alcohol (Ethanol)	NIOSH 1400	CSC	0.1–1	10	60
Ethyl Amyl Ketone	NIOSH 1301	CSC	1–25	10	60
Ethyl Butyl Ketone	NIOSH 1301	CSC	1–25	10	60
Ethyl Ether	NIOSH 1610	CSC	0.25–3	10	60
Ethylbenzene	NIOSH 1501	CSC	222–884	5	60
Ethylene Glycol (Mist and Vapour)	NIOSH 5523	OVS-7	5–60	15	140
Ethylene Glycol (Vapour)	NIOSH 5523	XAD-7	5–60	15	75
Ethylene Glycol Dimethyl Ether	GC FID	CSC	5-30	25	60
Fluoride Aerosol	NIOSH 7902	MCE + Cellulose treated	100–800	5	75
Fluoride Gas (see Hydrogen Fluoride)	-	-	-	-	-
Formaldehyde	NIOSH 2016	DNPH SG	15-50	0.2	100

Compound ID	Method #	Media	Air Volume L	RL (µg)	Rate C\$
Formaldehyde in dust	NIOSH 5700	PVC	240–1050	0.2	100
Glass, Fibrous	NIOSH 7400	PCM	100-300	3000 ff	30
Heptane (n-)	NIOSH 1500	CSC	4	5	60
Hexamethylene Diisocyanate (HDI) (see isocyanate)	-	-	-	-	-
Hexane (n-)	NIOSH 1500	CSC	4	5	60
Hydrogen Fluoride	NIOSH 7902	MCE + Cellulose treted	12–800	15	75
Hydrogen Peroxide	OSHA 1019	GF treated	240	10	75
Iron <sup>S</sup>	NIOSH 7301	MCE	5–100	5	60
Isoamyl Acetate	NIOSH 1450	CSC	1–10	10	60
Isoamyl Alcohol	NIOSH 1402	CSC	1–10	10	60
Isobutyl Acetate	NIOSH 1450	CSC	1–10	10	60
Isobutyl Alcohol	NIOSH 1401	CSC	2–10	10	60
Isocyanate (mono) (MDI, or HDI, or IPDI or TDI)	OSHA 5002	1-2PP GF	60-240	0.5	100
Isooctane	NIOSH 1500	CSC	10-50	5	60
Isophorone	NIOSH 2508	CSC	2–25	10	60
Isophorone Diisocyanite (IPDI) (see isocyanate)	-	-	-	-	-
Isopropyl Acetate	NIOSH 1454	CSC	1–10	10	60
Isopropyl Alcohol	NIOSH 1400	CSC	1–3	10	60
Isopropyl Ether	NIOSH 1618	CSC	1–3	10	60
Kerosene	NIOSH 1550	CSC	1–30	10	60
Lead <sup>S</sup>	NIOSH 7301	MCE	200–1000	2	60
Limonene	NIOSH 1552	CSC	2–30	5	60
Lithium <sup>S</sup>	NIOSH 7301	MCE	100–2000	2	60
Magnesium <sup>S</sup>	NIOSH 7301	MCE	5–67	2	60
Manganese <sup>S</sup>	NIOSH 7301	MCE	5–200	2	60
Mercury, Particulate <sup>S</sup>	NIOSH 7301	MCE	???–???	1	60
Mercury, Vapour <sup>S</sup>	NIOSH 6009	Hopcalite	2–100	0.1	160
Metal Working Fluid	NIOSH 5524	PTFE	100-1000	100	75
Methanol (Methyl Alcohol)	NIOSH 2000	SG	1–5	15	60



Compound ID	Method #	Media	Air Volume L	RL (µg)	Rate C\$
Methoxy-1-propanol (2-)	OSHA 99	CSC	1–20	15	60
Methoxy-1-propyl Acetate (2-)	OSHA 99	CSC	1–20	10	60
Methoxy-2-propanol (1-)	OSHA 99	CSC	1–20	15	60
Methoxy-2-propyl Acetate (1-)	OSHA 99	CSC	1–20	10	60
Methoxyethanol (2-)	NIOSH 1403	CSC	6–50	5	60
Methoxyethyl Acetate (2-)	NIOSH 1451	CSC	1–20	5	60
Methyl Acetate	NIOSH 1458	CSC	1–10	10	60
Methyl Acrylate	NIOSH 1459	CSC	1–5	10	60
Methyl Amyl Ketone; Heptanone-2	NIOSH 1301	CSC	1–25	10	60
Methyl Butyl Ketone; Hexanone (2-)	NIOSH 1300	CSC	1–10	10	60
Methyl Cyclohexane	NIOSH 1550	CSC	1–20	5	60
Methyl Ethyl Ketone	NIOSH 2500	Beaded Carbon	1-12	10	60
Methyl Isoamyl Acetate	NIOSH 1450	CSC	1–10	10	60
Methyl Isobutyl Carbinol	NIOSH 1402	CSC	1–10	10	60
Methyl Isobutyl Ketone	NIOSH 1300	CSC	1–10	10	60
Methyl Methacrylate	NIOSH 2537	XAD-2	1–8	10	60
Methyl Styrene (alpha-)	NIOSH 1551	CSC	1–10	5	60
Methyl-2-pyrrolidinone (N-)	NIOSH 1302	CSC	10–125	10	60
Methylene Diphenyl Isocyanate (MDI) (See Isocyanate)	-	-	-	-	-
Mineral Oil	NIOSH 5026	GF	100–1000	50	100
Mineral Oil (as metal working fluid)	NIOSH 5524	PTFE	100–1000	100	75
Mineral Spirit	NIOSH 1550	CSC	1–20	25	60
Mold Spore Count and ID	ASTM D7391	Air-O-Cell	75	100 fs/m <sup>3</sup>	45
Molybdenum <sup>S</sup>	NIOSH 7301	MCE	5–67	2	60
Naphtha (V M & P Naphtha)	NIOSH 1550	CSC	1–20	10	60
Naphthalene	NIOSH 1501	CSC	30–100	5	60
Nickel <sup>S</sup>	NIOSH 7301	MCE	100–1000	2	60
Nicotine	NIOSH 2544 (FID) <sup>WM</sup>	XAD-2	60–400	5	75
Nicotine (Low Detection Limit)	NIOSH 2544 (MSD) <sup>WM</sup>	XAD-2	60–400	0.2	110

Compound ID	Method #	Media	Air Volume L	RL (µg)	Rate C\$
Nitrobenzene	NIOSH 2005	SG	10–150	10	60
Nonane (n)	NIOSH 1500	CSC	10-50	5	60
Nonene-1	NIOSH 1500	CSC	10-50	5	60
Oil Mist (see Mineral Oil)	-	-	-	-	-
Octane (n)	NIOSH 1500	CSC	10-50	5	60
Particle size distribution (air dust)	Internal SOP	PCM	50-300	1%	100
Particulates Inhalable	MDHS 14/4	PVC	500-1000	100	30
Particulates Inhalable and Respirable	MDHS 14/4	PVC	500-1000	100	40
Particulates PM10	NIOSH 0600 <sup>WM</sup>	PVC	100–1000	100	30
Particulates PM2.5	NIOSH 0600 <sup>WM</sup>	PVC	100–1000	100	30
Particulates Respirable	NIOSH 0600	PVC	100–1000	100	30
Particulates Thoracic	NIOSH 0600 <sup>WM</sup>	PVC	100–1000	100	30
Particulates Total	NIOSH 0500	PVC	100–1000	100	30
Pentane (n-)	NIOSH 1500	CSC	1-30	5	60
Pentanone (2-); Methyl Propyl Ketone	NIOSH 1300	CSC	1–10	10	60
Peracetic Acid	NIOSH 2537	GF/SG-treated	15-35	0.4	120
Petroleum Ether	NIOSH 1550	CSC	0.2–20	10	60
Phenol	NIOSH 2546	XAD-7	1–24	10	60
Phenylcyclohexene (4-) ; 4-PCH	NIOSH 1601	CSC	1.5–15	5	75
Phenyl Ether; Diphenyl Ether	NIOSH 1617	CSC	1–50	10	60
Phosphorus <sup>S</sup>	NIOSH 7301 <sup>WM</sup>	MCE	25–2000	25	60
Polymer Dust	SOP L015	PVC	100-1000	100	75
Potassium <sup>S</sup>	NIOSH 7301	MCE	5–1000	7	60
Propyl Acetate (n-)	NIOSH 1460	CSC	1–9	5	60
Propyl Alcohol (n-)	NIOSH 1401	CSC	1–5	10	60
Propylene Glycol mist and vapour on OVS-7	NIOSH 5023	PTFE	500–2400	25	140
Propylene Glycol vapour on XAD7	NIOSH 5023	PTFE	500–2400	25	75
Pyridine	NIOSH 1613	CSC	18–150	15	60
Quinone (1,4-Benzoquinone)	NIOSH S181	XAD-2	10-200	5	100

Compound ID	Method #	Media	Air Volume L	RL (µg)	Rate C\$
Respirable Combustible Dust	OSHA ID196 <sup>WM</sup>	PVC	300-1000	100	30
Rubber Fumes	MDHS 47/3	GF	500-1000	100	75
Silica, Crystalline (Quartz and Cristobalite)	NIOSH 7602	PVC	400–1000	5	90
Silicone Oil	NIOSH 5026 <sup>WM</sup>	PTFE	500–1000	50	100
Silver <sup>S</sup>	NIOSH 7301	MCE	250–2000	2	60
Sodium Hydroxide (see “Alkaline dust”)	-	-	-	-	-
Sodium <sup>S</sup>	NIOSH 7301	MCE	100-1000	10	60
Soot in air (see Diesel Particulates)	-	-	-	-	-
Stoddard Solvent (Mineral Spirits)	NIOSH 1550	CSC	1–50	10	60
Styrene	NIOSH 1501	CSC	10–50	5	60
Tetrachloroethane (1,1,2,2-)	NIOSH 1019	CSC	3–30	25	60
Tetrachloroethylene; (Perchloroethylene)	NIOSH 1003	CSC	1–40	25	60
Tetrahydrocannabinol	SOP L39	GF	100-500	1	100
Tetrahydrofuran	NIOSH 1609	CSC	1–9	5	60
Toluene	NIOSH 1501	CSC	10-50	5	60
Toluene Diisocyanate (TDI)	OSHA 5002	1-2PP GF	60-240	0.5	100
Trichloroethane (1,1,1-)	NIOSH 1003	CSC	0.1–8	15	60
Trichloroethane (1,1,2-)	NIOSH 1003	CSC	2–60	15	60
Trichloroethylene	NIOSH 1022	CSC	1–30	15	60
Triglycidylisocyanurate (TGIC)	MDHS 85 <sup>WM</sup>	GF	200–1000	10	100
Trimethylbenzene (1,2,3-)	OSHA 2591	CSC	12	5	60
Trimethylbenzene (1,2,4-)	OSHA 2591	CSC	12	5	60
Trimethylbenzene (1,3,5-); (Mesitylene)	OSHA 2591	CSC	12	5	60
TVOC (Naphtha Range)	NIOSH 1550	CSC	1–50	5	60
Vanadium <sup>S</sup>	NIOSH 7301	MCE	100–1000	2	60
Vinyl Acetate	NIOSH 1453	Beaded Carbon	2-30	10	60
Xylenes	NIOSH 1501	CSC	5-50	5	60
Zinc <sup>S</sup>	NIOSH 7301	MCE	100–1000	2	60

Notes: Reporting limit can be changed by laboratory; S- test will be subcontracted to a laboratory accredited to ISO 17025 general accreditation level; WM – method used with modification

## Multi-element tests and scans on air samples.

Multiple tests can often be performed on a single sample. Some examples are presented below. For your specific project. **All prices are shown for the order of 2 or more samples.** Price is given in Canadian dollars and includes sampling media, analysis and reporting.

Compounds in the scan	Method	Rate \$
Isocyanate scans (monomers)	OSHA 5002	1 <sup>st</sup> 100, Additional- 30
Metals by ICP, scan for <u>any</u> of 19 metals below: aluminum, barium, cadmium, calcium, chromium, cobalt, copper, iron, lead, magnesium, manganese, molybdenum, nickel, potassium, silver, sodium, strontium, tin, zinc	NIOSH 7301 <sup>S</sup>	1 <sup>st</sup> metal - 60 Additional - 10
Metals by ICP, scan for selected 12 heavy metals: cadmium, chromium, cobalt, copper, iron, lead, manganese, molybdenum, nickel, silver, tin, zinc	NIOSH 7301 <sup>S</sup>	100
Metals by ICP, scan for 19 metals: aluminum, barium, cadmium, calcium, chromium, cobalt, copper, iron, lead, magnesium, manganese, molybdenum, nickel, potassium, silver, sodium, strontium, tin, zinc	NIOSH 7301 <sup>S</sup>	110
Metals by ICP, scan for 22 metals: aluminum, antimony, arsenic, barium, cadmium, calcium, chromium, cobalt, copper, iron, lead, magnesium, manganese, mercury, molybdenum, nickel, potassium, silver, sodium, strontium, tin, zinc	NIOSH 7301 <sup>S, WM</sup>	130
Metals by ICP, scan for 23 metals: aluminum, antimony, arsenic, barium, beryllium, cadmium, calcium, chromium, cobalt, copper, iron, lead, magnesium, manganese, mercury, molybdenum, nickel, potassium, silver, sodium, strontium, tin, zinc	NIOSH 7301 <sup>S, WM</sup>	140
PAH's scan (16 compounds). Detection Limit 0.5 ug/sample	NIOSH 5506	250
Solvent scan by GC FID (choose your own solvents, and call us to discuss) <sup>1)</sup>	Internal SOP	1 <sup>st</sup> 60, Additional- 20
VOC Scan by GC MS with open characterisation	Internal SOP	160

Notes: 1. Please call to confirm with us if the scan can be performed for your set of analytes; S- test will be subcontracted to an ISO 17025 accredited laboratory; WM – method used with modification

## Air Sampling Equipment Rent

LCS Laboratory Inc., offers air sampling equipment to our clients at the rental rates of approximately 1/3 of the industry average. The rates are calculated from the day the equipment leaving our laboratory to the day we receive it back. Lost or damaged equipment is invoiced at repair or replacement cost. One-way shipping insurance will be added to the shipping cost.

Equipment	Weekly Rate (\$ per 7 calendar days or less)	Monthly Rate (\$ per 30 calendar days)
Air Sampling Pump (Low Flow range 0.02-0.25 L/min) *)	45	90
Air Sampling Pump (Standard Flow range 1-3 L/min) *)	45	90
Air Sampling Pump (High Flow range 2-15 L/min) *)	45	90
Air Sampling manifold, 1-ports (flow controller)	20	40
Air Sampling manifold, 2-ports	20	40
Air Sampling manifold, 3-ports	20	40
Air Sampling manifold, 4-ports	20	40
Cassette Holder with a hose	5	10
Charger for sampling pumps (per pump)	3	5
Cyclone Aluminum (2.5 L/min)	15	30
Cyclone Aluminum with a clip (for Respirable Dust, 4.2L/min)	15	30
Cyclone Aluminum with a clip (for Thoracic Dust, 1.6L/min)	15	30
Cowl for Aluminum Cyclone calibration	15	30
Diffusive Sampler	40	-
Inhalable Sampler (IOM)	15	30
PPI samplers (disposable)	60	-
Pump Pre- and Post- calibration	10	-
Shipping by courier within 24-48 hours	At cost	-
Shipping the same day	Shipping cost + \$50 surcharge	-

Note: \*) The pumps are not intrinsically safe

## Surface Testing for Health and Safety

This section lists tests for non-volatile chemicals collected as surface samples. The surface samples can be collected as wipe samples, micro vacuum samples and tape lift. **All methods are modified from original methods** to be used for surface samples. Field blank sample should be analysed with every project. **All prices are shown for the order of 2 and more samples.** Price includes sampling media, analysis and reporting.

Compound	Sampling	Media	Reporting units and Limit	Rate (\$)
Asbestos Dust	Wipe/MV	AP/PVC	0.5% in ash	50
Carbon Black	MV	PVC	1% in dust	See Fire Testing
Chloride	Wipe	AP	2 ug	75
Dust Identification by Microscopy	MV	PCM	1% in dust	See Microscopy
Dust Total	MV	PVC	100 ug	30
Dust Total, Mineral, Organic	MV	PVC	100 ug	100
Fibers (Cellulose or Glass)	MV	PCM	3000 ff	30
Fluoride	Wipe	AP	2ug	75
Formaldehyde in dust	MV	PVC	0.2ug	140
Metals	Wipe	GW	2ug	85 for the first metal +10 for each additional metal
Mould Spore Count and ID	TL	CT	10 fs/cm <sup>2</sup>	See mould testing
Nicotine by GC MS	Wipe	AP	0.2	140
Oil Mineral	Wipe	Cotton	50	140
Oil Organic / Vegetable	Wipe	Cotton	50	140
Oil Silicone	Wipe	Cotton	50	140
PAH (list of 16)	Wipe	Cotton	0.5	250
Soot	Wipe	AP	5ug	See Fire Testing
Silica, Crystalline (Quartz and Cristobalite)	Wipe	AP	5	140
Tetrahydrocannabinol	Wipe	Cotton	1	140

Notes: Wipe- wipe sampling of a surface of standard size; TL – Tape Lift; MV-Microvacuuming; AP – Alcohol Pads; GF – Glass Fibre filter; GW- Ghost Wipe, CT – Clear Tape (Transparent tape), PVC – pre-weighed PVC filter; PCM – PCM style cassette with 25 mm MCE filter; QF- Quartz filter in 37 mm cassette. Cotton wipe

## Microscopy of loose dust

LCS Laboratory offers Stereo, Light, Phase Contrast and Polarized Light Microscopy for analysis of your samples

Test	\$/sample
Laboratory reports recognizable particles reported with their approximate concentration in per cent on sample. The list includes: glass fibres, manmade fibres, cellulose fibres, insect parts, plant parts, paint chips, rust flakes, plastic shavings, metal dust, environmental dust, mold spores, and other. Particles with concentration 1% and more are identified and reported	75
Additional Option 1. Particle size distribution 1-100 micron range	100
Additional Option 2. Digital images (jpg format). Includes images of 3 areas per sample	60

## Material Identification for Construction, Demolition, and Abatement projects

This list includes tests commonly used on construction and demolition projects in order to determine the presence of potentially harmful materials.

Test	Method	Reporting Limit	\$/sample
Asbestos in Construction Materials (except Vermiculite). Gravimetric Reduction, 400 – point count <sup>1)</sup>	EPA 600/R-93/116	0.5%	30
Asbestos in Construction Materials (except Vermiculite). Gravimetric Reduction, 1000 – point count <sup>1)</sup>	EPA 600/R-93/116	0.1%	70
Asbestos in Vermiculite <sup>1)</sup>	EPA/600/R-04/004 & EPA 600/R-93/116	0.1%	60
Coal Tar screening. This test is based on ASTM standard for coal tar solubility	ASTM D450/D4	NA	65 <sup>2)</sup>
Coal Tar screening. This test is based on ASTM standard for coal tar solubility, and fluorescent analysis for PAH/PCA presence	ASTM D450/D4; SOP	NA	95 <sup>2)</sup>
Lead in Paint <sup>5</sup>	NIOSH 7301	0.01%	65
Material identification (test on bulk material for glass fibres, cellulose fibres, hair, manmade fibres, paint chips, rust, biological materials, plants, insect parts, mineral dust, metal dust)	SOP	1%	75
Silica, Crystalline (Quartz and Cristobalite) total	NIOSH 7602 <sup>WM</sup>	0.5%	140 <sup>2)</sup>
Urea Formaldehyde Foam Insulation (UFFI)	SOP	Yes/No test	75
Urine in construction materials	SOP	Yes/No test	75

Note: S- subcontract; 1) If the “stop at positive” option is requested, the samples that were prepared but not tested will be invoiced at 30% of the test rate.

2) Minimum billing is for 2 samples



## Mould, pollen, and common allergens

Test	Method	Reporting Limit	2+ Samples \$/sample
Mould in air, spore count and ID on Air-O-Cell or Allergenco-D cassettes (5 min sampling)	ASTM D7391	100 fs/m <sup>3</sup>	45
Mould on tape lift. Spore count and ID	Internal SOP	10 fs/cm <sup>2</sup>	45
Biological Dust in air: Mould spore count and ID spores/m <sup>3</sup> , pollen count spores /m <sup>3</sup> , plant tissue (particles/m <sup>3</sup> ), Dog dander (particles/m <sup>3</sup> ), Bird dander (particles/m <sup>3</sup> ), Miscellaneous/Unidentifiable dander (particles/m <sup>3</sup> ), Animal hair (fibers/m <sup>3</sup> ), Human hair (fibers/m <sup>3</sup> ), Bird feather fibers (fibers/m <sup>3</sup> ), Insect dust and weathered bio dust (particles/m <sup>3</sup> ) on Air-O-Cell or Allergenco-D cassettes (5 min sampling)	ASTM D7391	100 particles/m <sup>3</sup>	75
Statistical analysis and air quality report for your data set	Internal SOP	-	65

## Fire Residues on Surfaces

These are tests developed for the detection of trace amounts of smoke residue on materials exposed to fire. **All prices are shown for the order of 2 and more samples.**

Test	Sampling and Media	Method	Reporting format and limit	Rate \$
<b>Ash, Carbon Black, Burnt Dust</b>	2 Tape lifts per sample	Microscopy and micro reactions. The lab identifies ash using micro reaction with acidified microscope oil.	Estimated concentration in % (RL=1%)	75
<b>Carbon Black, Soot, and Total Dust</b>	Alcohol wipes	The laboratory reports Dust load, Soot (particles less than 10 micron) and Carbon Black separately. The laboratory uses an internally developed method for extraction and separation of dust, soot, and char	Load in ug (RL=10-100 ug)	110
<b>Coal Tar Pitch Volatiles (PAH)</b>	Prewashed filter (contact LCS)	NIOSH 5506 with modification	Load in ug (RL=0.5ug)	250
<b>Dust Composition</b>	2 Tape lifts per sample	The laboratory uses Phase Contrast and Polarizing Light Microscopy to identify collected dust. We identify and report the following materials: carbon black, mineral dust, cellulose, manmade fibres, glass fibres, insect parts, metal rust, paint chips, and other	Estimated surface concentration in % (RL=1%)	75
<b>Dust Composition</b>	Alcohol wipes	Dust is extracted from the wipe and measured gravimetrically. The laboratory uses Phase Contrast and Polarizing Light Microscopy to identify collected dust. We identify and report the following materials: carbon black, mineral dust, cellulose, manmade fibres, glass fibres, insect parts, metal rust, paint chips, and other	Load in ug (RL=10-100 ug)	110
<b>Polycyclic Aromatic Compounds (PAC)</b>	Alcohol wipes	The laboratory uses Thin Layer Chromatography and fluorescence	Qualitative Present/Not Detected	75
<b>Soot ("Lamp soot", "Oil soot", sub-micron size carbon)</b>	Alcohol wipes	The laboratory uses an internally developed method and quantifies soot using UV-VIS spectroscopy in combination with the size separation technique.	Load in ug (RL=3ug)	75
<b>Total Tar and Oils</b>	Prewashed filter (contact LCS)	The laboratory extracts organic tars and oils from the wipes and quantifies it using gravimetric analysis. The reporting limit is 100 ug	Load in ug (RL=100ug)	75

Test	Sampling and Media	Method	Reporting format and limit	Rate \$
Volatiles in Fire debris	Bulk, 1L in Mason Jar	Detection and Quantification of Ignitable Liquids with ASTM E1413 method	Headspace concentration in mg/m <sup>3</sup>	180

## Trace Impurities in Polymer Products

This list includes tests commonly used to monitor residual impurities in final products. **All prices are shown for the test of 2 and more samples.**

Test	Method	Reporting Limit	Rate \$
Formaldehyde (free) in Polymers	Derivatization followed by HPLC UV	10 ppm	\$200
Isocyanate monomers in cured polymer	Derivatization followed by HPLC UV	100 ppm	\$200
Metals 1-12 metals	Ashing followed by ICP AES	10 ppm	\$165
Monomers in Polymers	Purge and Trap followed by GC FID	1 ppm	RQ
PAH's in cured polymer	HPLC -UV	5 ppm	\$250
Pentane in Polystyrene	Extraction followed by GC FID	1000 ppm	\$165
Volatile Monomers and Residual Solvents with identification by GC MS with database search	GC MS	100 ppm	\$295

*Note: RQ-Request a Quote*

## Material Identification for the development of Safety Data Sheets (SDS)

This list includes tests commonly used to establish the composition of the products. **All prices are shown for testing of 2 and more samples.**

Test	Method	Reporting Limit	Rate \$
Ash concentration	Gravimetric, loss on ignition	1%	70
Formaldehyde (leachable)	HPLC UV	0.05%	200
Metals 12 metals <sup>S</sup>	ICP AES	0.05%	165
Organics (solid) tentative identification by FTIR with database search	FTIR	75%	295
Organics (volatile) identification by GC MS with database search	GC MS	1%	295
Organic Content	Gravimetric, loss on ignition	1%	70
PAH's leachable	HPLC -UV	0.05%	250
Polymer tentative identification by FTIR with database search	FTIR	75%	140
Silica, Crystalline (Quartz and Cristobalite) total	NIOSH 7602 <sup>WM</sup>	0.5%	140

*Note: S- subcontract; RQ-Request Quote; WM – With Modification*

## Physical Properties Tests for development of Safety Data Sheet (SDS)

Test	Notes	Rate \$
Flash Point (closed cup)	Range from 2 to 93°C. Method ASTM D56	120
Initial Boiling Point	Range from 30 to 150°C. Method OECD 103	120
Initial Melting Point	Range from 0 to 150°C. Method OECD 102	120
Partition Coefficient Oil/Water	Method OECD 117	1800
pH of water extract	Range from 1 to 12 as per OECD 122 method	60
Solubility in water (solids)	The reported solubility range is from 100 to 10,000 mg/L. Method OECD105	160
Specific Gravity of Liquid	Method OECD 109, 2 decimals accuracy	70
Specific Gravity of Solid	Method OECD 109, 2 decimals accuracy	70
Viscosity	Various ASTM methods	120

RQ – Request a Quote

## Tests for Classification of Materials under Globally Harmonized System (GHS)

Tests that are used for the classification of potentially dangerous goods.

Class	Test	Notes	Rate \$
Class 3. Flammable Liquids	Flash Point (closed cup)	Range from 5 to 90°C. ASTM D56	120
Class 4. Flammable Solids	Readily Combustible	Burning Rate Test, flame propagation rate. Test performed in triplicate	350
Class 4. Flammable Solids	Self- heating Substances	UN N4 test, 100°C, 120°C, 140°C, 140°C (25 mm cell) tests. Or EPA 1060 140°C test. 24-hour test.	750/temp
Class 4. Flammable Solids	Water Reactive Substances	Spontaneous ignition at contact with water test, and gas evolution screening test. Test performed in triplicate	350
Class 4. Flammable Solids	Water Reactive Substances	Gas evolution rate. 7-hour test is performed in triplicate	600
Class 8. Corrosives	Corrosion Rate of Metals	Corrosion rate of 3 steel and 3 aluminum coupons at 55°C as per ASTM G31-72 method. Aluminum AL 7075-T6, Steel C-1025. Results for the rate of uniform and pitting corrosion are reported separately for every coupon	600
Class 8. Corrosives	Skin Corrosion	OECD 435. Corrositex procedure. Test is performed on 4 subsamples. Includes the cost of screening test.	1800

## Miscellaneous Material Testing

Test	Notes	Price \$/sample
Particle size distribution (75-60000 microns)	Separation on sieves	75
Particle size distribution (2-75 microns)	1-75 micron, Phase contrast microscopy	110
PM20 in bulk	ASTM D7928 (with modification)	110
PM10 in bulk	ASTM D7928 (with modification)	110
PM4 in bulk	ASTM D7928 (with modification)	110
PM2.5 in bulk	ASTM D7928 (with modification)	110
PM (any size) in bulk	ASTM D7928 (with modification)	110