

# LCS Laboratory Inc.

Accredited by AIHA LAP to ISO 17025-2017 standards

## 2025 Laboratory Price List



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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 6pm.	1-(next) business day	2 business days	3 business days	4 business days	6 business days	10 business days
<b>Additional Surcharge</b>	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)

USA 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 USA and Canada. Such tests are identified in the price list with superscript (s)

## Single-component air testing

This section includes available tests of air samples collected on tubes or filters according to standard sampling procedures. **All prices are shown for the order of 2 and more samples.** Price includes sampling media (**except Diffusive Samplers**), analysis and reporting.

Compound ID	Method #	Reporting Limit (µg)	2+ Samples \$/sample
Abietic Acid	SOP (HPLC UV)	5	100
Acetaldehyde	NIOSH 2018	0.5	100
Acetone	NIOSH 1300	10	60
Acetonitrile	NIOSH 1606	15	60
Acrolein (qualitative)	NIOSH 2018 <sup>WM</sup>	0.2	100
Alkaline Dust (Analysed as Na and reported as NaOH)	NIOSH 7301	100	60
Aluminium <sup>S</sup>	NIOSH 7301	2	60
Ammonia	NIOSH 6015	5	75
Amyl Acetate (n-)	NIOSH 1450	10	60
Amyl Acetate (sec-)	NIOSH 1450	10	60
Anisidine (o-)	NIOSH 2504	0.5	100
Antimony <sup>S</sup>	NIOSH 7301	1	60
Arsenic <sup>S</sup>	NIOSH 7301 <sup>WM</sup>	1	60
Asbestos Fibres in air (total fibre count)	NIOSH 7400	3000 ff	30
Asbestos Fibres in air (differential counting)	OSHA ID 160	3000 ff	30
Asphalt Fume (see "Benzene soluble")	-	-	-
Benzene	NIOSH 1500	3	60
Benzene Soluble Fraction (Please collect 1000L of air)	NIOSH 5042	100	75
Beryllium <sup>S</sup>	NIOSH 7301	0.1	60
Bromoethane; (Ethyl Bromide)	NIOSH 1011	15	60
Bromoform	NIOSH 1003	15	60
Bromopropane (1-)	NIOSH 1025	15	60
Butane	OSHA 2010 <sup>WM</sup>	10	60
Butoxyethanol (2-); (Butyl Cellosolve)	NIOSH 1403	10	60
Butoxyethyl Acetate (2-); (Butyl Cellosolve Acetate)	NIOSH 1403	10	60
Butyl Acetate (n-)	NIOSH 1450	10	60

Compound ID	Method #	Reporting Limit (µg)	2+ Samples \$/sample
Butyl Acetate (sec-)	NIOSH 1450	10	60
Butyl Acetate (tert-)	NIOSH 1450	10	60
Butyl Alcohol (n-)	NIOSH 1401	10	60
Butyl Alcohol (sec-), Butanol-2	NIOSH 1401	10	60
Butyl Alcohol (tert-)	NIOSH 1400	10	60
Cadmium <sup>S</sup>	NIOSH 7301	2	60
Butyl Catechol (tert-)	OSHA PV 2016 <sup>WM</sup>	5	110
Calcium <sup>S</sup>	NIOSH 7301	2	60
Carbon Black	OSHA ID 196 <sup>WM</sup>	100	70
Carbon Elemental, see Diesel Particulates	-	-	-
Carbon Tetrachloride	NIOSH 1003	15	60
Cellulose Fibres	NIOSH 7400	3000 ff	30
Charcoal (as loss on ignition)	NIOSH 5000	100	75
Chlorobenzene; (Monochlorobenzene)	NIOSH 1003	15	60
Chloroethane (Ethyl Chloride)	NIOSH 2519	15	60
Chloroform (Trichloromethane)	NIOSH 1003	15	60
Chromium <sup>S</sup>	NIOSH 7301	2	60
Chromium, Hexavalent (Cr(VI) soluble fraction only)	NIOSH 7600	0.5	75
Coal Dust (as loss on ignition)	NIOSH 5000	100	75
Coal Tar Pitch Volatiles (see Benzene Soluble, please collect 1000L)	-	-	-
Coal Tar Pitch Volatiles (as selected PAH's)	OSHA 58	1	250
Cobalt <sup>S</sup>	NIOSH 7301	2	60
Coke Oven Emission (see Benzene Soluble, please collect 1000L)	-	-	-
Copper <sup>S</sup>	NIOSH 7301	2	60
Cresol	NIOSH 2546	10	60
Cumene	NIOSH 1501	5	60
Cyclohexane	NIOSH 1500	5	60
Cyclohexanol	NIOSH 1402	10	60
Cyclohexanone	NIOSH 1300	10	60
Decane	NIOSH 1500	5	60

Compound ID	Method #	Reporting Limit (µg)	2+ Samples \$/sample
Di(2-ethylhexyl)phthalate (DEHP)	OSHA 104	15	75
Diacetone Alcohol	NIOSH 1402	10	75
Dibutyl Phthalate	NIOSH 5020	15	75
Dichlorobenzene (o-)	NIOSH 1003	15	60
Dichlorobenzene (p-)	NIOSH 1003	15	60
Dichloroethane (1,1-)	NIOSH 1003	15	60
Dichloroethane (1,2-)	NIOSH 1003	10	60
Dichloroethylene (1,2-)	NIOSH 1003	15	60
Dichloromethane	NIOSH 1005	10	60
Diesel Particulates <sup>5</sup>	NIOSH 5040	3	115
Diethyl Ether	NIOSH 1610	10	60
Diethyl Phthalate	OSHA 104	15	75
Diethylene Glycol	NIOSH 5523	20	75
Diethylene Glycol Monoethyl Ether	OSHA 2013	20	60
Diisobutyl Ketone; Dimethyl-4-Heptanone (2,6-)	NIOSH 1300	10	60
Dimethyl Phthalate	OSHA 104	15	75
Dioxane (1,4-)	NIOSH 1602	10	60
Dipropylene Glycol Methyl Ether	OSHA 101	15	60
Ethoxyethanol (2-); Cellosolve	NIOSH 1403	10	60
Ethoxyethyl Acetate (2-); Cellosolve Acetate	NIOSH 1450	10	60
Ethyl Acetate	NIOSH 1457	10	60
Ethyl Alcohol (Ethanol)	NIOSH 1400	10	60
Ethyl Amyl Ketone; 5-Methyl-3-heptanone	NIOSH 1301	10	60
Ethyl Butyl Ketone; (3-Heptanone)	NIOSH 1301	10	60
Ethyl Ether	NIOSH 1610	10	60
Ethylbenzene	NIOSH 1501	5	60
Ethylene Glycol (Mist and Vapour on OVS-7)	NIOSH 5523	15	140
Ethylene Glycol (Vapour on XAD-7)	NIOSH 5523	15	75
Ethylene Glycol Dimethyl Ether	OSHA 7	25	60
Fluoride Aerosol	NIOSH 7902	5	75

Compound ID	Method #	Reporting Limit (µg)	2+ Samples \$/sample
Fluoride Gas (see Hydrogen Fluoride)	-		
Formaldehyde	NIOSH 2016	0.2	100
Formaldehyde in dust	NIOSH 5700	0.2	100
Glass, Fibrous	NIOSH 7400	3000 ff	30
Heptane (n-)	NIOSH 1500	5	60
Hexamethylene Diisocyanate (HDI)	OSHA 42	0.5	100
Hexane (n-)	NIOSH 1500	5	60
Hydrogen Fluoride	NIOSH 7902	2	75
Hydrogen Peroxide	OSHA 1019	10	75
Iron <sup>s</sup>	NIOSH 7301	5	60
Isoamyl Acetate	NIOSH 1450	10	60
Isoamyl Alcohol	NIOSH 1402	10	60
Isobutyl Acetate	NIOSH 1450	10	60
Isobutyl Alcohol	NIOSH 1401	10	60
Isocyanate (mono) (MDI, or HDI, or IPDI or TDI)	OSHA 42/47	0.5	100
Isooctane; (2,2,4-Trimethyl pentane)	NIOSH 1500	5	60
Isophorone	NIOSH 2508	10	60
Isophorone Diisocyanite (IPDI)	OSHA 2534	1	100
Isopropyl Acetate	NIOSH 1454	10	60
Isopropyl Alcohol	NIOSH 1400	10	60
Isopropyl Ether	NIOSH 1618	10	60
Kerosene	NIOSH 1555	25	60
Lead <sup>s</sup>	NIOSH 7301	2	60
Limonene	NIOSH 1552	5	60
Lithium <sup>s</sup>	NIOSH 7301	2	60
Magnesium <sup>s</sup>	NIOSH 7301	2	60
Manganese <sup>s</sup>	NIOSH 7301	2	60
Mercury, Particulate <sup>s</sup>	NIOSH 7301	1	60
Mercury, Vapour <sup>s</sup>	NIOSH 6009	0.1	160
Metal Working Fluid	NIOSH 5524	100	75



Compound ID	Method #	Reporting Limit (µg)	2+ Samples \$/sample
Methanol (Methyl Alcohol)	NIOSH 2500	15	60
Methoxy-1-propanol (2-); (2M1P); Propylene Glycol Methyl Ether	OSHA 99	15	60
Methoxy-1-propyl Acetate (2-)	OSHA 99	10	60
Methoxy-2-propanol (1-); (1M2P)	OSHA 99	15	60
Methoxy-2-propyl Acetate (1-); (1M2PA)	OSHA 99	10	60
Methoxyethanol (2-); (Methyl Cellosolve)	NIOSH 1403	5	60
Methoxyethyl Acetate (2-); (Methyl Cellosolve Acetate)	NIOSH 1451	5	60
Methyl Acetate	NIOSH 1458	10	60
Methyl Acrylate	NIOSH 1459	10	60
Methyl Amyl Ketone; Heptanone-2	NIOSH 1301	10	60
Methyl Butyl Ketone; Hexanone (2-); (MBK)	NIOSH 1300	10	60
Methyl Cyclohexane	NIOSH 1550	5	60
Methyl Ethyl Ketone	NIOSH 2550	10	60
Methyl Isoamyl Acetate	NIOSH 1455	10	60
Methyl Isobutyl Carbinol	NIOSH 1402	10	60
Methyl Isobutyl Ketone	NIOSH 1300	10	60
Methyl Methacrylate	NIOSH 2537	10	60
Methyl Styrene (alpha-), Vinyl Toluene	NIOSH 1551	5	60
Methyl-2-pyrrolidinone (N-)	NIOSH 1302	10	60
Methylene Bisphenyl Isocyanate (MDI) (See Isocyanate)	OSHA 47	-	-
Mineral Oil	NIOSH 5026	25	100
Mineral Oil (as metal working fluid)	NIOSH 5524	100	75
Mineral Spirit	NIOSH 1550	25	60
Mould Spore Count and ID	ASTM D7391	100 fs/m <sup>3</sup>	45
Molybdenum <sup>S</sup>	NIOSH 7301	2	60
Naphtha (V M & P Naphtha)	NIOSH 155	10	60
Naphthalene	NIOSH 1501	5	60
Nickel <sup>S</sup>	NIOSH 7301	2	60
Nicotine	NIOSH 2544 <sup>WM</sup>	5	75
Nitrobenzene	NIOSH 2555	10	60

Compound ID	Method #	Reporting Limit (µg)	2+ Samples \$/sample
Nonane (n)	NIOSH 1500	5	60
Nonene-1	NIOSH 1500	5	60
Oil Mist (see Mineral Oil)	-	-	-
Octane (n)	NIOSH 1500	5	60
Particle size distribution (air dust collected on MCE or PCM filter)	Internal SOP	1%	100
Particulates Inhalable (IOM rent is extra)	MDHS 14/4	100	30
Particulates Inhalable and Respirable (reported separately), (IOM rent is extra)	MDHS 14/4	100 (each)	40
Particulates PM1 (Cyclone rental is extra)	NIOSH 0600 <sup>WM</sup>	100	30
Particulates PM10 (Cyclone rental is extra)	NIOSH 0600 <sup>WM</sup>	100	30
Particulates PM2.5 (Cyclone rental is extra)	NIOSH 0600 <sup>WM</sup>	100	30
Particulates Respirable (Cyclone rental is extra)	NIOSH 0600	100	30
Particulates Thoracic (Cyclone rental is extra)	NIOSH 0600 <sup>WM</sup>	100	30
Particulates Total	NIOSH 0500	100	30
Pentane (n-)	NIOSH 1500	5	60
Pentanone (2-); Methyl Propyl Ketone	NIOSH 1300	10	60
Peracetic Acid	Internal SOP	5	120
Petroleum Ether	NIOSH 1550	10	60
Phenol	NIOSH 2546	10	60
Phenylcyclohexene (4-); 4-PCH	NIOSH 1601	5	75
Phenyl Ether; Diphenyl Ether	NIOSH 1617	10	60
Phosphorus <sup>S</sup>	NIOSH 7301 <sup>WM</sup>	25	60
Polymer Dust (as combustible dust)	SOP	100	75
Potassium Hydroxide (as Potassium)	NIOSH 7301	15	60
Potassium <sup>S</sup>	NIOSH 7301	7	60
Propyl Acetate (n-)	NIOSH 1460	5	60
Propyl Alcohol (n-)	NIOSH 1401	10	60
Propylene Glycol mist and vapour on OVS-7	NIOSH 5023	25	140
Propylene Glycol vapour on XAD7	NIOSH 5023	25	75
Pyridine	NIOSH 1613	15	60
Quinone (1,4-Benzoquinone)	NIOSH S181	5	100

Compound ID	Method #	Reporting Limit (µg)	2+ Samples \$/sample
Rubber Fumes	MDHS 47/3	100	75
Silica, Crystalline (Quartz and Cristobalite)	NIOSH 7602	5	90
Silicone Oil	NIOSH 5026 <sup>WM</sup>	25	100
Silver <sup>S</sup>	NIOSH 7301	2	60
Sodium Hydroxide (see "Alkaline dust")	-	-	-
Sodium <sup>S</sup>	NIOSH 7301	10	60
Soot in air (see Diesel Particulates)	-	-	-
Stoddard Solvent (Mineral Spirits)	NIOSH 1550	10	60
Styrene	NIOSH 1501	5	60
Tetrachloroethane (1,1,2,2-)	NIOSH 1019	25	60
Tetrachloroethylene; (Perchloroethylene)	NIOSH 1003	25	60
Tetrahydrocannabinol	SOP	1	100
Tetrahydrofuran	NIOSH 1609	5	60
Toluene	NIOSH 1501	5	60
Toluene Diisocyanate (TDI)	OSHA 42	0.5	100
Trichloroethane (1,1,1-)	NIOSH 1003	15	60
Trichloroethane (1,1,2-)	NIOSH 1003	15	60
Trichloroethylene	NIOSH 1022	15	60
Triglycidylisocyanurate (TGIC)	MDHS 85 <sup>WM</sup>	10	100
Trimethylbenzene (1,2,3-)	OSHA 2591	5	60
Trimethylbenzene (1,2,4-)	OSHA 2591	5	60
Trimethylbenzene (1,3,5-); (Mesitylene)	OSHA 2591	5	60
TVOC (Naphtha Range)	NIOSH 1550	5	60
Urea Formaldehyde Foam Insulation Dust (see formaldehyde in dust)	-	-	-
Urea Formaldehyde Foam Insulation vapour (see formaldehyde)	-	-	-
Vanadium <sup>S</sup>	NIOSH 7301	2	60
Vinyl Acetate; 1-Acetoxyethylene, VAM	NIOSH 1453	10	60
Xylenes	NIOSH 1501	5	60
Zinc <sup>S</sup>	NIOSH 7301	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	2+ Samples \$/sample
Isocyanate scans (monomers)	OSHA 42/47	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 0.2 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
VOC and SVOC Scan by GC MS with open characterisation	Internal SOP	250

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 + \$150 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 technique	Media	Reporting units and Limit	2+ Samples \$/sample
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
Fibres (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	Wipe	Cotton	5	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, mould 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 D460/D4	NA	60 <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 D460/D4; SOP	NA	90 <sup>2)</sup>
Coal Tar Pitch Volatiles in roofing tar. Scan for 16 PAH by GC FID	NIOSH 5515	0.05%	180 <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 (fibres/m <sup>3</sup> ), Human hair (fibres/m <sup>3</sup> ), Bird feather fibres (fibres/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	2+ Samples \$/sample
<b>Ash, Carbon Black, Burnt Dust</b>	2 Tape lifts per sample	SOP L060. Microscopy and micro reactions. The lab identifies ash using micro reaction with acidified microscope oil. This is a qualitative which produces concentration of fire debris within the dust.	Estimated concentration in % (RL=1%)	75
<b>Carbon Black, Soot, and Total Dust</b>	Alcohol wipes	SOP L061. 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. This test measures concentration of total dust and of each component of the dust un ug/sample.	Load in ug (RL=10-100 ug)	110
<b>Coal Tar Pitch Volatiles (PAH)</b>	Prewashed filter (contact LCS)	SOP L062. NIOSH 5506 with modification	Load in ug (RL=0.5ug)	250
<b>Dust Composition</b>	2 Tape lifts per sample	SOP L063. 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	SOP L064. 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	SOP L065. The laboratory uses Thin Layer Chromatography and fluorescence	Qualitative Present/Not Detected	75

Test	Sampling and Media	Method	Reporting format and limit	2+ Samples \$/sample
<i>Soot ("Lamp soot", "Oil soot", sub-micron size carbon)</i>	Alcohol wipes	SOP L037. 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
<i>Total Tar and Oils</i>	Prewashed filter (contact LCS)	SOP L066. 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

## 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	2+ Samples \$/sample
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
Vinyl Acetate monomer in Poly Vinyl Acetate	Purge and Trap followed by GC FID	1 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	2+ Samples \$/sample
Ash concentration	Gravimetric, loss on ignition	1%	70
Formaldehyde (leachable)	HPLC UV	0.05%	200
Metals 1-12 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	\$/sample
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

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	Price \$/sample
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, 125, 140°C, 140°C (25 mm cell) tests. Or EPA 1060 140°C test. 24-hour test.	730/temp.
Class 4. Flammable Solids	Water Reactive Substances	Spontaneous ignition at contact with water test, and gas evolution screening test. Test performed in triplicate	330
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 60°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