

Adelaide Exposure Science and Health

(Formerly the Occupational and Environmental Hygiene Laboratory)

Analytical Chemical Laboratory Pricing

Effective 1 January to 31 December 2019

Staff are experienced hygienists, and as well as providing analysis reports for the substances of interest, will also provide:

- Advice on sampling/analysis techniques for any analysis that we provide
- Advice on sampling strategies
- Limited Interpretation of results (complex interpretation of data may incur a fee – discuss with laboratory Staff)

If you have any questions regarding sampling/analysis methods for substances that are not included on our list, please contact us on (08) 8313 4957 or email oe@adelaide.edu.au

Please send samples to:

Adelaide Exposure Science and Health Laboratory, The University of Adelaide, 28 Anderson Street, Thebarton, South Australia 5031

NOTE:

Our Lab is internationally recognised for its research and capability with regards to chemical testing of skin and surfaces.

We can undertake chemical performance testing of gloves, as well as tests of the skin penetration of chemicals, using internationally recognised methods.

If you are seeking to evaluate the performance of your gloves or PPE against specific chemicals or mixtures, please contact the lab for further details.

Our laboratory can also undertake project work involving GC and HPLC analysis. Our in-house test atmosphere generator can be utilised to generate known concentrations of organic solvents for quality control analysis techniques and evaluating organic vapour samplers.

Analysis* of	Details	Price (ex GST)	Method
<p><u>ISOCYANATES</u> Toluene diisocyanate (TDI) Methylene bisphenyl diisocyanate (MDI) Hexamethylene diisocyanate (HDI) p-toluene sulphonyl isocyanate (PTSI) Isophorone diisocyanate (IPDI) Dicyclo hexylmethane-4,4 diisocyanate(HMDI)</p>	<p>The analysis will determine Monomeric and Polymeric isocyanates (i.e. total isocyanates as NCO) on impregnated filters or derivatising solutions.</p> <p>A blank reference filter is required for the analysis and there is no cost involved with analysis of the blank.</p> <p>A reference sample of the isocyanate should also be provided</p> <p>Provide a copy of SDS for the isocyanate</p> <p>Sampling heads will be provided on request at no charge as long as they are returned.</p>	<p>\$245</p>	<p>Health & Safety Executive (HSE) MDHS 25/3 using 1,2 methoxy phenyl piperazine coated glass fibre filters and or toluene solution containing 1,2 methoxy phenyl piperazine.</p> <p>The analysis method is via HPLC using Electrochemical and UV detectors.</p>
<p><u>ALDEHYDES</u> Acetaldehyde Acrolein Formaldehyde Glutaraldehyde</p> <p>And other aldehydes if standards are available</p>	<p><i>Analysis cost per aldehyde listed</i></p> <p><i>Analysis for more than one aldehyde per sample is negotiable depending on the number of samples</i></p> <p><i>Active or passive diffusion samplers are provided by the laboratory at no extra charge.</i></p>	<p>\$115</p>	<p>Adaptation of Health & Safety Executive (HSE), Method for determination of Aldehydes in air (MDHS 102)</p> <p>Using 2,4 dinitrophenyl hydrazine (DNPH) on active or passive sampling heads using HPLC with UV detection.</p>

<p><u>ORGANIC VAPOURS</u></p> <p><i>Occupational Hygiene</i> Aliphatic & aromatic hydrocarbons alcohols, chlorinated hydrocarbons ketones, acrylates glycols/ esters, acetates & terpenes complex solvent mixtures</p> <p>(see appendix A for the list of solvents that can be analysed) If a solvent or solvent mixture is not on the list please contact our Laboratory to discuss a quotation.</p>	<p>Analysis for charcoal tubes eg SKC 226-01 & SKC 226-09) & passive diffusion monitors (e.g. 3M 3500 & 3M 3520; SKC passive samplers)</p>	<p>\$105</p>	<p><i>HSE MDHS 88 and 96, 'Volatile organic compounds in air', using GC/FID</i></p> <p>Analysis if by gas chromatography using a flam ionisation detector.</p>
<p><i>Environmental</i> Environmental/indoor air analysis for VOCs using active and passive sampling methods including Radiello samplers</p>	<p>Contact the laboratory for a quotation and to discuss your sampling/analysis needs</p>		<p><i>HSE MDHS 88 and 96, 'Volatile organic compounds in air', using GC/MS</i></p>
<p>PHENOL, CRESOLS</p>	<p>SKC226-95 (XAD-7) tubes are used to collect air samples of phenol and cresols</p>	<p>\$135</p>	<p>OHSA 32, phenol and cresols are analysed by HPLC using a UV detector</p>

*** NOTES: (all prices are ex GST, if applicable)**

1. Analysis Fee discount

- A 10% discount will apply for more than 10 samples
 - For batches of 20 or more samples contact the Laboratory to negotiate the fee.
2. Postage/handling of sampling media is an extra charge of \$25 (in Australia). Larger parcels and International packages may incur a higher cost.
 3. No additional fee is charged for the supply of sampling heads/filters for aldehydes and isocyanates. Un-used samplers must be returned to the laboratory within 30 days otherwise a fee of \$35 per sampler will apply.
 4. Except where otherwise indicated, the analysis charge does not include the cost of sorbent tubes or passive badges, used for organic vapour analysis. These devices are normally purchased by the client from suppliers of air sampling equipment.
 5. Analysis of blank samples supplied will not incur a fee.
 6. Turnaround time is usually 10 working days. However, longer periods will be considered for larger number of samples in consultation with the client.
 7. Priority analysis (48 hours) may be arranged prior to monitoring/sending samples and will incur an extra 50% on top of the regular price.

Clients should refer to the Terms and Conditions and Service Agreement form when requesting analysis. Please note that a purchase order (or equivalent) with a signature from an authorised person is also required.

If you have any enquiries please call the laboratory on (08) 8313 4957 or send an email to: oe@adelaide.edu.au

Appendix 1 – List of Organic Solvents

<p>Aliphatic H/C</p> <p>pentane n-hexane n-heptane n-octane n-nonane n-decane n-undecane n-dodecane n-tridecane n-tetradecane</p> <p>Aromatic H/C</p> <p>benzene toluene ethyl benzene xylene styrene</p> <p>Chlorinated H/C</p> <p>methylene chloride trichloroethylene perchloroethylene (tetrachloroethylene) 1,1,1 trichloroethane (methyl chloroform)</p> <p>Ketones</p> <p>acetone methyl ethyl ketone (MEK) methyl isobutyl ketone (MIBK)</p>	<p>Glycols/Esters</p> <p>1-methoxy-2- Propanol (CAS 107-98-2) 2- methoxy ethanol (CAS 109-86-4) 2-ethoxy ethanol (CAS 110-80-5) 2-butoxy ethanol (CAS 111-76-2) 2-methoxy ethyl acetate (CAS 110-49-6) 1-methoxy-2- propanol acetate (CAS 108-65-6) 2-ethoxy ethyl acetate (CAS 111-15-9) 2-butoxy ethyl acetate (CAS 112-07-2)</p> <p>Acetates</p> <p>ethyl acetate propyl acetate butyl acetate isobutyl acetate</p> <p>Ethers</p> <p>glycol ether</p> <p>Acrylates</p> <p>methyl methacrylate ethyl methacrylate</p> <p>Terpenes</p> <p>a-pinene b- pinene d-limonene</p>	<p>Alcohols</p> <p>methanol ethanol n-propanol isopropanol n-butanol iso-butanol carbon disulphide acetone</p> <p>Solvent Mixtures</p> <p>white spirits kerosene jet-fuel petroleum naphtha Other – upon request provided a standard solvent is available.</p> <p>Miscellaneous</p> <p>N-methyl-2- Pyrrolidone N-vinyl-2-pyrrolidone</p>
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