



Indoor Air Analysis Of PCBs

Effective Screening Tool for Evaluating the Potential for Building Material Contamination

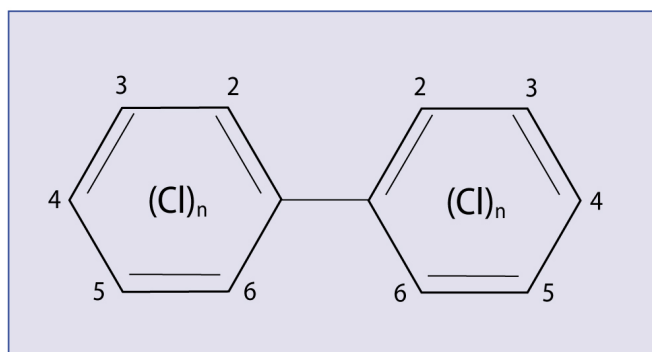
Polychlorinated biphenyls (PCBs) are a class of chlorinated hydrocarbons that are believed to cause adverse health effects in humans. It has been established that older buildings that were constructed, or renovated, between 1950 and 1978 could have been built with materials that contained PCBs. These suspected building materials were primarily caulking compounds that were used for windows, weather stripping, expansion joints, etc. but it should be noted that there are other materials from this time period that have also been found to contain PCBs as well.

It is recommended that concerned building owners and property managers confer with an experienced environmental consultant for recommendations on how best to evaluate the situation. In addition, the US Environmental Protection Agency has issued a considerable amount of guidance to help manage the problem and minimize the potential for exposure. One potential strategy for concerned building owners may be to test for total PCBs in the indoor air. The EPA has established safety threshold air concentrations for use in schools that could be used as a general benchmark to evaluate whether there is a problem or not.

The EPA recommends two testing methods for total PCBs in air: TO-4 and TO-10A, with the low flow TO-10A method commonly used for indoor air applications. While most environmental laboratories analyze for PCB aroclors in water and soil samples, aroclor analysis is not recommended for air samples. A much more representative and accurate total PCB concentration can be obtained by analyzing for the individual constituent PCB compounds (congeners) themselves or by summing the congeners by degree of chlorination (homologs), with the homolog approach being the most cost effective.

PCB congener and homolog analysis is a sophisticated, technically demanding analytical technique that requires considerable talent and experience. Alpha Analytical has over 15 years experience with these methods and we are the largest, most specialized air testing laboratory in the Northeast.

For more information, please contact your Technical Sales Representative or visit our website at www.alphalab.com.



| PCB Homolog | |
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| Monochlorobiphenyls | Hexachlorobiphenyls |
| Dichlorobiphenyls | Heptachlorobiphenyls |
| Trichlorobiphenyls | Octachlorobiphenyls |
| Tetrachlorobiphenyls | Nonachlorobiphenyls |
| Pentachlorobiphenyls | Decachlorobiphenyls |
| PCB Congener Specific Analysis | |
| 209 Congeners (full list of congeners) | |

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