



## Model 8078 Indoor Air Quality Test Kit



### What is Indoor Air Quality?

Indoor Air Quality (IAQ) is normally associated with non-industrial environments such as office buildings, schools, hotels, residences, etc. As these structures typically do not employ readily identifiable hazardous materials, the cause of a poor indoor air quality condition can be difficult to troubleshoot.

Tighter building envelopes (designed to minimize heat and air conditioning losses), and HVAC systems balanced to recirculate a greater percentage of their air and bring in less fresh air from outside, tend to concentrate air contaminants over time rather than exhaust them outside or dilute them with fresh air. The contaminants are not actually due to new sources, but are now more noticeable because of their tendency to accumulate. For example, the following contaminants existed long before the problems associated with poor indoor air quality:

- Formaldehyde: Particle board furniture and sub-flooring, foam insulation
- Carbon Monoxide: Leaky furnaces/boilers, vehicle exhaust entrainment into building
- Carbon Dioxide: Human respiration
- Volatile Organic Carbons (VOC's): Carpeting, adhesives, paints
- Ozone: Photocopiers, Laser printers
- Ammonia: Blueprint duplicators, cleaners
- Trichloroethylene: Dry cleaning residue



### Product Description

The Matheson Model 8078 is a complete kit for analyzing many parameters pertaining to indoor air quality. All of the items included are also available as standalone products and are described elsewhere in this catalog. Please refer to the pages 390 - 393 for more complete details of each item.

The heart of the Model 8078 kit is the Matheson-Kitagawa precision air sampling pump. It is used in conjunction with a variety of detector tubes. Included in the kit are tubes for measuring the concentration of formaldehyde, carbon monoxide, carbon dioxide and organic hydrocarbons. And although not included in the kit as standard, tubes are available for ammonia, ozone and a host of other gases and vapors. Qualitative tubes are also included for analysis of unknown materials. An air flow indicator kit (smoke tubes) is provided for determining ventilation patterns and efficiencies. And a 10 meter extension sampling hose is provided for remote sampling in hard to reach places. All of these products are packaged with relevant maintenance items in a convenient, extremely durable carrying case.



### Ordering Information

| Model Number    | Description   |
|-----------------|---|
| 8078            | Indoor Air Quality Test Kit, complete with the following items: |
| (1) 8014-400A   | Air Sampling Pump   |
| (1) 8014-002    | Spare Rubber Inlet Flanges (6)                                  |
| (1) 8014-003    | Maintenance Pump Lubricant                                      |
| (5) 8014-1065B  | Carbon Monoxide Tubes, 5-50 ppm                                 |
| (7) 8014-1265C  | Carbon Dioxide Tubes, 300-7000 ppm                              |
| (5) 8014-1875   | General Hydrocarbons Tubes, 50-1400 ppm                         |
| (10) 8014-1715B | Formaldehyde Tubes, 1-35 ppm                                    |
| (1) 8014-131    | Qualitative Inorganic Tubes                                     |
| (2) 8014-186B   | Qualitative Organic Tubes                                       |
| (1) 8014-300K   | Air Flow Indicator Kit  |
| (1) 8014-018    | 10m Extension Sampling Hose                                     |
| (1)             | Hard Shell Carrying Case  |