

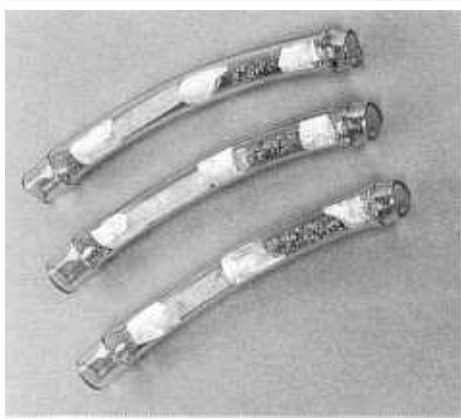
## FEATURES

Controlled smoke generation for determining flow and velocity of slow-moving air currents  
 Excellent for tracing air currents in shafts, mines, tunnels, as well as heating, ventilating and air-conditioning systems  
 Kits come with everything needed for smoke generation

## DESCRIPTION

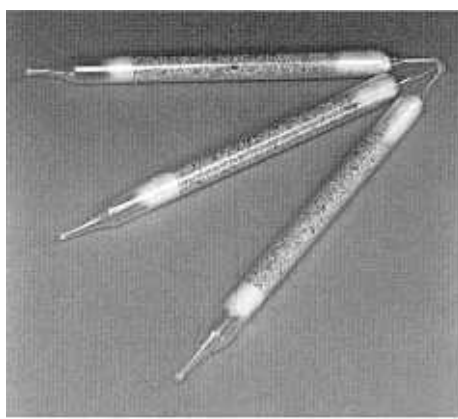
MSA Ventilation Smoke Tube Kits are for use where controlled generation of a visible smoke is desired in order to determine the velocity, direction and flow patterns of slow-moving air currents in shafts, mines and tunnels. They can also be used in commercial buildings and industrial processing plants to determine the velocity and flow patterns of heating, ventilating and air-conditioning systems.

Ventilation Smoke Tube Kits consist of a hand-held rubber aspirator bulb, two rubber plugs and smoke-producing tubes of either plastic or glass design.



### Plastic Smoke Tubes

Every plastic tube contains two hermetically sealed glass ampoules that each contain a different chemical. To use, the user slips the sheath of the tube over the exhaust fitting of the aspirator bulb. The user then crushes the glass ampoules in the tube. The vapors of the two chemicals contained in the ampoules mix and create smoke when the user pushes air through the plastic tube by squeezing the rubber aspirator bulb. Two domed metal screens are mounted inside each plastic tube to trap the glass fragments from the broken ampoules.



### Glass Smoke Tubes

Glass tubes contain a chemically impregnated media that generates smoke when it is exposed to air being pushed through the tube by the aspirator bulb. To operate, the user simply snaps off and discards both of the scored ends of the tube. Next, the user inserts one end of the tube into the exhaust fitting of the aspirator bulb. To generate smoke, the user squeezes the aspirator bulb.

With either style, a single tube is intended to supply smoke for one day of normal use. Once smoke has been emitted from the tube, the user should watch the direction and speed of the smoke movement. To determine velocity, the travel time of the smoke should be taken over a premeasured distance. When testing is complete, simply remove the bulb from the plastic or glass tube and plug both ends of the tube with rubber stoppers supplied with the kit.

### ORDERING INFORMATION

Part No.	Description
458481	MSA Ventilation Smoke Tube Kit, including aspirator bulb, two rubber plugs, and six <i>plastic</i> smoke tubes contained in a plastic carrying case
5607	MSA Ventilation Smoke Tube Kit, including aspirator bulb, six tube caps and two <i>glass</i> smoke-producing tubes contained in a plastic carrying case
458480	Plastic Smoke Tubes, package of 12
5645	Glass Smoke Tubes, package of 12

Note: This Data Sheet contains only a general description of the MSA Ventilation Smoke Tube Kits. While uses and performance capabilities are described, under no circumstances should these products be used until the instructions, labels or other literature accompanying the products have been read and understood and the precautions therein set forth followed. Only they contain the complete and detailed information concerning these products.



Offices and representatives in principal cities worldwide.  
**In U.S. call nearest stocking location toll free at 1-800-MSA-2222.**  
**To reach MSA International, call (412) 967-3249 or Telex 812453.**

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