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Gas Generation Tube Data Sheet

Irritant Smoke

No. 10-123-01

Use & Color: Break open both ends of the tube using the tube tip breaker. Insert one end into a rubber bulb and squeeze the bulb to generate a white smoke. The tube changes from a dark reddish brown to a lighter reddish brown. The tube can be used repeatedly until it is spent. Keep the tube closed between uses with the supplied rubber caps.

Reagent Type: Stannic chloride

Reaction Principle: $\text{SnCl}_4 + \text{H}_2\text{O} \rightarrow \text{stannic oxychlorides} + 2\text{HCl}$

Humidity Range: 10 - 95% RH. The smoke generating life increases about 10% at 20% RH and decreases about 10% at 80% RH (incoming air humidity).

Temperature Range: 0 - 40°C (32 - 104°F). As temperature decreases the smoke lasts longer and is less intense.

Storage Life and Conditions: 2 years in darkness at 5 - 25°C (40 - 77°F)

CAUTIONS ON USE:

- Read, understand and comply with all labels, warnings and instructions accompanying these tubes before use. Failure to comply may cause serious injury or death.
- For use in respirator fit testing according to OSHA 29 CFR 1910.134 (appendix A) and OSHA 1910.139.
- Wear safety glasses and gloves to protect against chemical exposure and flying glass. Wear a respirator when exposed to smoke. Vapors are corrosive to skin and overexposure can result in serious injury or death.
- DO NOT inhale smoke directly. If inhaled enough to cause coughing, remove victim to fresh air. If coughing persists, provide oxygen and contact a physician.
- Use only in a well-ventilated area. DO NOT use in a confined space.
- DO NOT use under a respirator fit testing hood or other enclosed space because fume concentrations may build up to levels that can cause serious injury or death.
- Avoid contact of smoke with skin. DO NOT direct smoke stream directly at the skin during fit testing. If smoke contacts skin for prolonged time, flush with copious amounts of water for 15 minutes and contact a physician.
- If smoke contacts eyes, immediately flush with water for 15 minutes and contact a physician. Eyes should be kept tightly closed during fit testing.
- Use only the pump(s) at the flow rates specified in OSHA CFR 1910.134 and 29 CFR 1910.139. If the pump is operated at non-specified flow rates it could increase the smoke and fume concentrations and cause serious injury or death.
- Do not use smoke tubes in areas that may contact food or food eating areas.
- Do not use for fit testing on persons with pre-existing respiratory or related medical conditions or are allergic to tin compounds or hydrochloric acid.

Caution: Dispose of spent or expired tubes according to local regulations. Each tube contains 0.7g of stannic chloride before use. Tube contents generate hydrochloric acid on contact with water.