Aerosol Exposure Control - Shaker

Lab shakers create aerosols because the vigorous mechanical agitation of liquids generates small liquid droplets or solid particles that become suspended in the air.

SHAKER: Safety Practices

- Routinely inspect mixing equipment for any signs of wear or deterioration that could lead to aerosol release.

- Always use properly sealed, heavy-duty screw-capped vessels, preferably with an O-ring, during mixing operations.

- Operate shaking equipment inside a certified biosafety cabinet (BSC) or other containment equipment whenever possible. If shaker cannot be placed inside a BSC, all mixing vessels should be transferred to and opened inside a BSC to prevent the release of aerosols.

Shaking open containers or vessels with loose closures allows liquid droplets to escape and become airborne.

- Pressure builds up in the vessel during the mixing. Vigorous shaking will create a heavy aerosol. Swirling movements generate a homogenous suspension with less aerosol production.