

Artificial Smoke and Fog Code of Safe Practices

The following procedures should be considered when using Artificial Smoke and Fog on productions. For additional information, please contact your Production Safety Representative.

- Productions should only use products and equipment for the generation of Artificial Smoke and Fog (ASF) that are approved for the studio division and/or filming region, and that have established correction factors. Consult your Production Safety Representative for a list of approved products* and equipment.
- Safety Data Sheets (SDSs) for ASF fluid should be followed and made readily available for cast and crew as part of an effective Hazard Communication Program.
- Only use fluids approved by the manufacturer of the machine.
- It is recommended that the minimum concentration of ASF be used for the least amount of time necessary to achieve the desired effect.
- Pre-production ASF monitoring should be undertaken to measure the levels of ASF desired by the Director of Photography, and to ensure that the exposure levels are at or below Permissible Exposure Limits (PELs). Generally, the production will need to consult with an Industrial Hygienist (IH) for this monitoring.
- If production utilizes a machine/fluid combination that does not have an existing calibration factor an IH will need to be engaged to create the calibration factor via an air sampling exercise.
- Contact your Production Safety Representative to discuss which machine/fluid combination may be preferable. The production may need to consult with an IH in some situations.
- During production, monitoring with a properly calibrated direct reading instrument may be required to ensure that levels do not exceed the applicable PEL.
- The production is required to have an individual assigned to monitor and record ASF levels on set. Typically, this duty is performed by a member of the Special Effects team or a consulting IH. Talk to your Production Safety Representative to arrange for training.
- All monitoring data collected should be sent to, and retained by, the Production Office Coordinator (POC) and archived in the safety folders.
- Refer to your region's ASF safety bulletin to determine appropriate control measures (e.g., ventilation and exhaust mechanisms)
- Contact your Production Safety Representative for region specific requirements if minors (under 18 years of age) may be present during ASF use.
- ASF effects are not to be used around infants and minors under the age of two. There are other restrictions for minors over the age of 2. Please contact your Production Safety Representative to discuss.

*List of Calibration Factors for ASF Fluids:

- Ramboll List

Safety Bulletins:

- [CSATF Safety Bulletin #10 and 10A Guidelines Regarding the Use of Artificially Created Atmospheric Fog & Haze](#)
- [ActSafe Safety Bulletin #10 and #10A – Artificial Smokes and Fogs](#)