



Fog from A to Z

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Material Safety Data Sheet

EFFECTIVE DATE: 01/15/2008

Antari Lighting and Effects Ltd. provides this MSDS in order to promote consumer understanding of the hazards associated with these products.

The information contained herein should be made available to all Antari employees, agents, contractors, and customers. In turn, these same should make this MSDS available to their employees, agents, contractors and customers. As such, this MSDS shall be included in the master shipping cartons of all products identified below.

I. IDENTIFICATION

PRODUCT NAMES: "FLG- Fog Liquid", "FLR -Fog Liquid" "FLY- Fog Liquid"

FORMULA: Pure grade propylene glycol, anionic desurfactant (de-ionized water) and Pure grade glycerin.

II. PHYSICAL PROPERTIES

APPEARANCE AND ODOR	Pale green, pale red, clear, clear, clear; slight odor
BOILING POINT (760 mm Hg)	210 - 435 F
EVAPORATION RATE (Butyl Acetate=1)	.003 - .006
SPECIFIC GRAVITY (H ₂ O=1)	1.075 - 1.085 AT 20 C
SOLUBILITY IN WATER	Completely soluble over 65 F
VAPOR PRESSURE AT 20 C	<.025 - .0245 mm Hg
VAPOR DENSITY (air=1)	3.85 - 3.93

III. INGREDIENTS

These products are all "water-based" glycol solutions. As such, toxicity is minimal. These products have been shipped internationally for more than 5 years under the Antari name, and are considered "non-hazardous" by most national health and safety regulatory bodies.

Tests conducted by independent laboratories have confirmed the non-hazardous nature of these liquids. The most recent material test returned the following results:

Chromium (Cr)	not detected
Cadmium (Cd)	not detected
Mercury (Hg)	not detected
Arsenic (As)	not detected

IV. FLAMMABILITY DATA

Due to the fact that de-ionized water forms the base for all these solutions, no detectable fire or explosion hazard exists. Flammability is undetermined due to the lack of a flash point or auto-ignition temperature. Extinguishing techniques and/or media should be determined by the fire/safety personnel on site: water, foam, CO₂ and dry chemical media will not cause an adverse chemical or physical reaction with these products.

V. HEALTH HAZARD DATA

No exposure limits have been determined for these products, nor for any of the ingredients from which they are formulated.

Swallowing has no adverse effects in low doses. Higher doses may induce nausea and vomiting, but with no long-term toxicity. Inhalation produces no adverse effects when used according to standard practices. Continuous exposure to highly concentrated fog may lead to throat/respiratory tract irritation. Under such conditions, irritation should subside immediately upon moving to an area of low fog concentration. The fog produced by these products will be adequately filtered by any 10 - 20 micron filtration system. Contact with the liquid may cause minimal, temporary irritation to exposed skin areas. Eye contact with the liquid may also cause minimal, temporary irritation. In all cases of contact with the liquid, flushing of the exposed area with water is sufficient. No contra-indications may be determined, as the ingredients have no independently toxicological effects, even when considered combinatively with possible pre-existing physical conditions or dietary/medicinal regimens. Treatment of egregious overexposure may be determined by health personnel, with principal attention given to the control of symptoms and overall clinical status.

VI. SPILL AND DISPOSAL PROCEDURES

Spills will result in a slippery film on most surfaces. Flushing with water is a sufficient response. Liquids may be safely disposed according to standard waste disposal methods.

VII. REACTIVITY DATA

The liquids described herein are stable formulas. No avoidable reactive risks can be determined through an extrapolation of all possible uses. Exposure to air, heat, water and oxidants poses no risk for reaction. Non-standard combustion of these formulas may produce aldehydes, ketones, carbon dioxide and/or carbon monoxide.

VIII. CONCLUSION

The products covered by this MSDS are not regulated by any international regulating bodies, including the WHMIS. As such, they may be classified as non-hazardous. In view of the above MSDS, the most critical special information concerns protecting employees from irritation which may accompany long-term exposure to the products. They should be able to avoid repeated contact with skin, eyes and/or clothing. Rubber or otherwise coated gloves and eye protection should be worn when handling large volumes or quantities of these products.

IX. TRANSPORT INFORMATION

Road transport information

ADR Non-hazardous goods

RID Non-hazardous goods

Inland waterways transport

ADNR Non-hazardous goods

Marine transport

IMDG/UM Non-hazardous goods

Air transport

ICAO/IATA-DGR Non-hazardous goods

Dispatch by post Permitted