

Material Safety Data Sheet

(Revision: 1.0)

Date Issued: August 26, 2013

Section 1: Product and Company Identification

Product Name Fog Fluid	Trade Name FLG-1 / FLG-2 / FLG-4 / FLG-5 / FLG-6 / FLG-10 / FLG-20 / FLG-200	Product Type Stage
Manufacturer's Name Antari Lighting & Effects Ltd.		
Manufacturer's Address No. 8, Lane 231, Sec 1, Nankan Road, Luzhu Township, Taoyuan County 338, Taiwan (R.O.C.)		
Telephone Number for Information +866 33225829	Emergency Telephone Number Jason Ho +866 33225829 jasonho@antari.com.tw	

Section 2: Hazards Identification

	Hazard Ratings		Ratings Key 0 = minimal 1 = slight 2 = moderate 3 = serious 4 = severe
	<u>NPCA/HMIS</u>	<u>NFPA 704</u>	
Health	1	1	
Flammability	0	0	
Reactivity	0	0	

Section 3: Composition / Information on Ingredients

Product Description: Compounding		
Note: This is not a dangerous substance	CAS No.	Concentration
Ethykene Glycol	107-21-1	40%
Glycerin (mist)	56-81-5	15%
Acid Blue	3844-45-9	2.6 – 5 PPM
Food Yellow 3	2783-94-0	2.6 – 5 PPM
Sodium Dehydroacetic	4418-26-2	2.6 – 5 PPM
Distilled Water	7732-18-5	45%

Section 4: **First Aid Measures**

Inhalation: Supply fresh air; consult doctor in case of complaint.

Skin contact: Immediately wash with water and soap and rinse thoroughly. If skin irritation continues, consult a doctor.

Eye contact: Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

Swallowing: If symptoms persist, consult doctor.

Section 5: **Fire-Fighting Measures**

Suitable extinguishing agents: Use fire fighting measures that suit the environment.

Special hazards arising from the substance or mixture. No further relevant information available.

Protective equipment: Mouth respiratory protective device.

Section 6: **Accidental Release Measures**

Personal precautions, protective equipment and emergency procedures. Mount respiratory protective device.

Environmental precautions:

- Dilute with plenty of water.
- Do not allow to enter sewers / surface or ground water.

Methods and material for containment and cleaning up:

- Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Section 7: **Handling & Storage**

Handling:

- Precautions for safe handling: Keep receptacles tightly sealed.
- Information about protection against explosions and fires: Keep ignition sources away.

Storage:

- Requirements to be met by storerooms and receptacles: Store in a cool location.
- Information about storage in one common storage facility: Store away from foodstuffs. Store away from flammable substances.
- Further information about storage conditions: Keep receptacle tightly sealed.

Section 8: Exposure Controls / Personal Protection

Components with limit values that require monitoring at the workplace	
56-81-5 Glycerol	
PEL (USA)	15* 5** mg/m ³ – *total dust **respirable fraction
TLV (USA)	10* ppm – *mist
EL (Canada)	10* 3** mg/m ³ – *mist; **mist, respirable
EV (Canada)	10 mg/m ³
EL (Mexico)	10 mg/m ³ (i)
107-21-1 Ethylene Glycol	
MAC (China)	20 mg/m ³
MAC (Russia)	5 mg/m ³
TLV (USA)	ACGIH 100 mg/m ³

Additional information: The lists that were valid during the creation were used as basis.

Based on the composition shown in section 3, the following measures are suggested for occupational safety measure

PERSONAL PROTECTIVE EQUIPMENT

General protective and hygienic measures

The usual precautionary measures for handling chemicals should be followed:

- Breathing equipment: Suitable respiratory protective device recommended.
- Protection of hands: The glove material has to be impermeable and resistant to the product / the substance / the preparation. Due to missing tests no recommendation to the glove material can be given for the product / the preparation/ the chemical mixture. Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation
- Material of gloves: The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.
- Penetration time of glove material: The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.
- Eye protection: Goggles recommended during refilling.

Section 9: Physical and Chemical Properties

General Information			
Form:	Liquid	Lower explosion limits:	Not available
Color:	Transparent	Upper explosion limits:	Not available
Odor:	Odorless	Vapor pressure:	Not available
Odor threshold:	Not available	Density:	Not available
pH value:	Not available	Relative density:	Not available
Melting point / range:	Not available	Vapor density:	Not available
Freezing point:	Not available	Evaporation density:	Not available
Boiling point / range:	Not available	Solubility in / miscibility with water:	Not available
Flash point:	Not available	Partition coefficient (n-octanol/water):	Not available
Flammability (solid/gaseous):	Not available	Dynamic viscosity:	Not available
Auto-ignition temperature:	Not available	Kinematic viscosity:	Not available
Decomposition temperature:	Not available		

Section 10: Stability and Reactivity

Reactivity: No decomposition if used according to specifications.
Chemical stability: Stable under recommended storage conditions.
Possibility of hazardous reactions: No dangerous reactions known.
Conditions to avoid: No further relevant information available.
Incompatible materials: No further relevant information available.
Hazardous decomposition products: No dangerous decomposition products known.

Section 11: Toxicological Information

ACUTE TOXICITY

LD/LC50 values that are relevant for classification		
56-81-5 glycerol		
Oral	LD50	4090 mg/kg (mouse); 12600 mg/kg (rat)
Dermal	LD50	> 10000 mg/kg (rabbit)
107-21-1 Ethylene glycol		
Oral	LD50	5500 mg/kg (rat)
4418-26-2 Sodium dehydroacetic		
Oral	LD50	1175 mg/kg (rat)

- Primary irritant effect on the skin: Irritating effect possible
- Primary irritant effect on the eye: Irritating effect possible
- Sensitization: Sensitization possible through skin contact.

- Additional toxicological information: The product is not subject to classification according to internally approved calculation methods for preparations: When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us.

CARCINOGENIC CATEGORIES

IARC (International Agency for Research on Cancer)	None of the ingredients is listed
NTP (National Toxicology Program)	None of the ingredients is listed

Section 12: **Ecological Information**

Toxicity

- Aquatic toxicity: No further relevant information available.
- Persistence and degradability: No further relevant information available.
- Bioaccumulative potential: No further relevant information available.
- Mobility in soil: No further relevant information available.

Additional ecological information

General notes: Water hazard class 1 (Self-assessment): slightly hazardous for water. Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

Section 13: **Disposal Considerations**

Waste treatment methods

Recommendation: Smaller quantities can be disposed of with household waste.

Uncleaned packagings

Recommendation: Disposal must be made according to official regulations.

Recommended cleansing agent: Water, if necessary with cleansing agents.

Section 14: **Transport Information**

UN-Number DOT, IMDG, IATA	Not available	Packaging Group DOT, IMDG, IATA	Not available
UN Proper Shipping Name DOT, IMDG, IATA	Not available	Marine Pollutant	No
Transport Hazard Class(es) DOT, ADN, IMDG, IATA	Not available	Special Precautions for User	Not available
Class -	Not available	EMS Number MARPOL73/78, IBC Code	Not available

Section 15: Regulatory Information

Safety, health and environmental regulations/legislation specific for the substance or mixture	
Section 355 (extremely hazardous substances):	None of the ingredients is listed
Section 313 (Specific toxic chemical listings):	None of the ingredients or substance are listed
TSCA (Toxic Substances Control Act):	All ingredients are listed
Proposition 65	
Chemicals known to cause cancer:	None of the ingredients is listed
Chemicals known to cause reproductive toxicity for females:	None of the ingredients is listed
Chemicals known to cause reproductive toxicity for males:	None of the ingredients is listed
Chemicals known to cause developmental toxicity:	None of the ingredients is listed
Carcinogenicity categories	
EPA (Environmental Protection Agency):	None of the ingredients is listed
TLV (Threshold Limit Value established by ACGIH):	None of the ingredients is listed
NIOSH-Ca (National Institute for Occupational Safety and Health):	None of the ingredients is listed
OSHA-Ca (Occupational Safety & Health Administration):	None of the ingredients is listed
Water hazard class:	Class 1 (self-assessment): slightly hazardous for water

Section 16: Other Information

The contents and format of this MSDS/SDS are in accordance with 29 CFR 1910.1200(g).

DISCLAIMER OF LIABILITY

The information in this MSDS/SDS was obtained from sources which we believe are reliable. However, the information is provided without any warranty, express or implied, regarding its correctness. The conditions or methods of handling, storage, use or disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product. This MSDS/SDS was prepared and is to be used only for this product. If the product is used as a component in another product, this MSDS/SDS information may not be applicable.

Abbreviations and acronyms:

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

ACGIH: American Conference of Governmental Industrial Hygienists

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

LC50: Lethal concentration, 50%

LD50: Lethal dose, 50%

