Version 1

Product Name Fog Liquid (FLM-05P)

Issue Date 10-MAY-2019 Revision date 10-MAY-2019

SECTION 1: Identification of the substance /mixture and of the company/undertaking

1.1. Product identifier Product Name Fog Liquid (FLM-05P) REACH registration number No information available 1.2. Relevant identified uses of the substance or mixture and uses advised against Recommended Use Used for smoke generator on the stage.

Recommended Use Used for smoke generator on the stage. Uses advised against No information available

1.3. Details of the supplier of the safety data sheet

Supplier	ANTARI LIGHTING AND EFFECTS LTD
Address	8,Lane 231, Nankan, Rd, Sec.1,Luchu,Tao Yuan City, Taiwan
Postal Code	33859
Phone	03-322-5829#318
FAX	03-322-0433
E-mail	any@antari.com.tw
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- Importer Address Postal Code Phone FAX E-mail
- 1.4. Emergency telephone number 03-322-5829#318

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture Classification according to Regulation (EC) No. 1272/2008 [CLP]

Not classified.

2.2. Label elements

Symbols/Pictograms	None
Signal word	None
Hazard Statements	Not applicable
Precautionary Statements	Not applicable
EU Specific Hazard Statements	None.

2.3. Other hazards

No information available.

SECTION 3: Composition/information on ingredients

3.1 Mixture

Chemical Name	EC No	CAS No	Weight-%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
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Propylene Glycol	200-338-0	57-55-6	60	Not classified
Water	231-791-2	7732-18-5	35	Not classified
Glycerol	200-289-5	56-81-5	5	Not classified

SECTION 4: First aid measures

4.1. Description of first aid measures

General advice

Remove contaminated clothing and shoes. If symptoms persist, call a physician.

Inhalation

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical advice/attention if you feel unwell.

Skin Contact

Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Wash contaminated clothing before reuse. If skin irritation persists, call a physician.

Eye contact

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

Ingestion

Rinse mouth. Get medical attention. Never give anything by mouth to an unconscious person.

Self-protection of the first aider

First aider: Pay attention to self-protection. Use personal protection recommended in Section 8.

4.2. Most important symptoms and effects, both acute and delayed

No information available.

4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. No information available.

Unsuitable extinguishing media

5.2. Special hazards arising from the substance or mixture Thermal decomposition can lead to release of irritating and toxic gases and vapors.

5.3. Advice for firefighters

Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Evacuate personnel to safe areas. Ensure adequate ventilation, especially in confined areas. Remove all sources of ignition. Do not touch or walk through spilled material. Avoid contact with skin, eyes or clothing. Avoid breathing dust/fume/gas/mist/vapors/spray. Use personal protection recommended in Section 8.

6.2. Environmental precautions

Local authorities should be advised if significant spillages cannot be contained. Prevent entry into waterways, sewers, basements or confined areas.

6.3. Methods and material for containment and cleaning up

Contain and collect spillage with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see Section 13).

6.4. Reference to other sections

See Section 7 for more information See section 8 for more information See section 13 for more information

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Handle in accordance with good industrial hygiene and safety practice. Ensure adequate ventilation, especially in confined areas. Avoid contact with skin, eyes or clothing. Wash contaminated clothing before reuse. Take precautionary measures against static discharges. Do not breathe dust/fume/gas/mist/vapors/spray. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Use personal protection recommended in Section 8.

7.2. Conditions for safe storage, including any incompatibilities

Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from heat. Keep locked up and out of reach of children. Store in accordance with local regulations.

7.3. Specific end use(s)

Apart from the uses mentioned in SECTION 1.2 no other specific uses are stipulated.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Chemical Name	Australia	Austria	Belgium	Denmark	European Union
Propylene Glycol (CAS #: 57-55-6)	150 ppm 474 mg/m ³ 10 mg/m ³	-	-	-	-
Glycerol (CAS #: 56-81-5)	10 mg/m ³	-	-	-	-

Chemical Name	Latvia	France	Finland	Germany	Italy
Propylene Glycol (CAS #:	TWA: 7 mg/m ³	-	-	-	-
57-55-6)					
Glycerol (CAS #: 56-81-5)		TWA: 10 mg/m ³	TWA: 20 mg/m ³	TWA: 50 mg/m ³	-
		_	_	Ceiling / Peak: 100	
				mg/m ³	

Chemical Name	Norway	United Kingdom	ACGIH TLV	OSHA PEL	NIOSH IDLH
Propylene Glycol (CAS #: 57-55-6)	TWA: 25 ppm TWA: 79 mg/m ³ STEL: 25 ppm STEL: 79 mg/m ³	-	-	-	-

Derived No Effect Level (DNEL)

No information available

Predicted No Effect Concentration (PNEC)

No information available

8.2. Exposure controls

Engineering Controls

Showers. Eyewash stations. Ventilation systems. Ensure adequate ventilation, especially in confined areas.

Personal protective equipment

Eye/face protection	Wear safety glasses with side shields (or goggles).
Hand Protection	Wear protective gloves.
Skin and body protection	Suitable protective clothing.
Respiratory protection	In case of insufficient ventilation, wear suitable respiratory equipment.
Thermal hazards	None under normal processing

Environmental exposure controls

Avoid release to the environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	Transparent liquid
Color	No information available
Odor	No information available
Odor Threshold	Not determined
рН	5.0-6.0
Melting point/freezing point	Not determined
Boiling point / boiling range	Not determined
Flash / Fire point	134/136
Evaporation rate	Not determined
Flammability (solid, gas)	Not determined
Explosive limits	Not determined
Flammability Limit in Air	Not determined
Vapor Pressure	Not determined
Vapor density	Not determined
Relative density	Not determined
Partition coefficient (LogPow)	Not determined
Autoignition temperature	Not determined
Decomposition temperature	Not determined
Kinematic viscosity	Not determined
Dynamic viscosity	Not determined
Explosive properties	Not an explosive
Oxidizing properties	Not determined

9.2. Other information

No information available

SECTION 10: Stability and reactivity

10.1. Reactivity

No information available.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

None under normal processing.

10.4. Conditions to avoid

Heat, flames and sparks.

10.5. Incompatible materials

Acids. Bases. Oxidizers.

10.6. Hazardous decomposition products

Decomposition products may include the following materials: carbon dioxide, carbon monoxide

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Propylene Glycol (CAS #: 57-55-6)	22000 mg/kg bw(rat)	> 2000 mg/kg bw(rabbit)	> 317042 mg/m³(rabbit)
Glycerol (CAS #: 56-81-5)	= 12600 mg/kg (Rat)	> 10 g/kg (Rabbit)	> 570 mg/m ³ (Rat)1 h

Skin corrosion/irritation

Non-irritating to the skin.

Serious eye damage/eye irritation

No eye irritation.

Sensitization

No sensitization responses were observed.

Germ cell mutagenicity

No information available.

Carcinogenicity

Not classified

Reproductive toxicity

No information available.

STOT - single exposure

No information available.

STOT - repeated exposure

No information available.

Aspiration hazard

No information available.

SECTION 12: Ecological information

12.1. Toxicity

Chemical Name	Algae/aquatic plants EC50	Fish LC50	Crustacea EC50
Propylene Glycol (CAS #:	19000: 96 h Pseudokirchneriella	51600: 96 h Oncorhynchus	-
57-55-6)	subcapitata mg/L EC50	mykiss mg/L LC50 static 41 -	
		47: 96 h Oncorhynchus mykiss	
		mL/L LC50 static 51400: 96 h	
		Pimephales promelas mg/L	
		LC50 static 710: 96 h	
		Pimephales promelas mg/L	
		LC50	
Glycerol (CAS #: 56-81-5)	-	51 - 57: 96 h Oncorhynchus mvkiss mL/L LC50 static	-

12.2. Persistence and degradability

No information available.

12.3. Bioaccumulative potential

Chemical Name	Partition coefficient (LogPow)
Glycerol (CAS #: 56-81-5)	-1.76
Chemical Name	Bioconcentration factor (BCF)

12.4. Mobility in soil

No information available.

12.5. Results of PBT and vPvB assessment

PBT/vPvB assessment information is not available as chemical safety assessment not conducted.

12.6. Other adverse effects

No information available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste from residues/unused	Disposal should be in accordance with applicable regional, national and local laws
products	and regulations.
Contaminated packaging	Disposal should be in accordance with applicable regional, national and local laws
	and regulations.

SECTION 14: Transport information

14.1. UN number	Not regulated		
14.2. UN proper shipping name	Not regulated		
14.3. Transport hazard class(es)	Not regulated		
14.4. Packing group	Not regulated		
14.5. Environmental hazards	Not regulated		
14.6. Special precautions for user	No information available		
14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code	Does not apply		

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture European Union

Component	EINECS/ELINCS	SVHC candidates	RESTRICTIONS - REACH TITLE VIII
Propylene Glycol 57-55-6 (60)	X	-	-
Water 7732-18-5 (35)	X	-	-
Glycerol 56-81-5(5)	X	-	-

Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work

Take note of Directive 94/33/EC on the protection of young people at work Take note of Directive 92/85/EC on the protection of pregnant and breastfeeding women at work

International Inventories

Component	TSCA	DSL/NDSL	ENCS	IECSC	KECL	PICCS	AICS
Propylene Glycol 57-55-6 (60)	Х	X	Х	Х	Х	Х	Х
Water 7732-18-5(35)	Х	X	Exempted	Х	Х	Х	Х
Glycerol 56-81-5 (5)	Х	X	Х	Х	Х	Х	Х

"-" Not Listed

"X" Listed

15.2. Chemical safety assessment

No information available.

SECTION 16: Other information

This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006

Issue Date	10- MAY-2019
Revision date	10- MAY-2019
Revision Note	Not applicable

Key or legend to abbreviations and acronyms used in the safety data sheet

TWA - TWA (time-weighted average) STEL - STEL (Short Term Exposure Limit)

Ceiling - Maximum limit value

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

Key literature references and sources for data

ECHA: http://echa.europa.eu/

IFA GESTIS: http://gestis-en.itrust.de/nxt/gateway.dll?f=templates\$fn=default.htm\$vid=gestiseng:sdbeng HSDB: http://toxnet.nlm.nih.gov/newtoxnet/hsdb.htm

Full text of H-Statements referred to under section 3

Not classified

Disclaimer

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----- End of Safety Data Sheet ------