SAFETY DATA SHEET

Regulation (EC) No 1907/2006 (REACH), Annex II (COMMISSION REGULATION (EU) No 2015/830)

Version 1

Product Name Fog Liquid (FLP-05 / FLP-1 / FLP-4 / FLP-5/AD/SÚÉ / FLP-20 / FLP-200)

Issue Date 28-Mar-2017 Revision date 28-Mar-2017

TCVISION date 20-Mai-2017

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

1.1. Product identifier

Product Name Fog Liquid (FLP-05 / FLP-1 / FLP-4 / FLP-5 / FLP-20 / FLP-20)

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.

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

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	Chemical Name EC No		Weight-%	Classification according to
				Regulation (EC) No. 1272/2008 [CLP]
Propylene glycol	200-338-0	57-55-6	40	Not classified
Water	231-791-2	7732-18-5	40	Not classified

Glycerol	200-289-5	56-81-5	20	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.

Unsuitable extinguishing media No information available.

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/m³ 10 mg/m³	-	-	-	-
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/m³	

Chemical Name	Norway	United Kingdom	ACGIH TLV	OSHA PEL	NIOSH IDLH
Propylene glycol (CAS #:	TWA: 25 ppm	-	-	-	-
57-55-6)	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

Revision date 28-Mar-2017

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

AppearanceTransparent liquidColorNo information availableOdorNo information available

Odor Threshold Not determined

pH 5.65

Melting point/freezing pointNot determinedBoiling point / boiling rangeNot determined

Flash point

CAS: 56-81-5 160°C (closed cup) CAS: 7732-18-5 Not determined **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

None known based on information supplied.

10.6. Hazardous decomposition products

None under normal use conditions.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity

Chemical Name	Chemical Name Oral LD50		Inhalation LC50
Propylene glycol (CAS #: 57-55-6)	= 20 g/kg (Rat)	= 20800 mg/kg (Rabbit)	-
Glycerol (CAS #: 56-81-5)	= 12600 mg/kg (Rat)	> 10 g/kg (Rabbit)	> 570 mg/m³ (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	-
		mykiss 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)
Propylene glycol (CAS #: 57-55-6)	1

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 products

Disposal should be in accordance with applicable regional, national and local laws

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 (65)	Х	-	-
Water 7732-18-5(20)	Х	-	-
Glycerol 56-81-5 (10)	Х	-	-

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 (65)	X	X	X	X	X	X	X
Water 7732-18-5 (20)	Х	X	Exempted	Х	Х	Х	Х
Glycerol 56-81-5 (10)	Х	X	Х	Х	Х	Х	Х

[&]quot;-" Not 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

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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

The information provided in this Material Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

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

[&]quot;X" Listed