

# LIQUID FOR ARTIFICIAL SMOKE GENERATOR

## Material Safety Data Sheet

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Version: 1.0

### SECTION 1. IDENTIFICATION OF THE SUBSTANCE / PREPARATION AND IDENTIFICATION OF THE COMPANY

**1.1 Product identification: LIQUID FOR ARTIFICIAL SMOKE GENERATOR**

**1.2 1.2 Relevant identified uses of the substance or mixture and uses advised against:** Liquid for generating smoke in smoke generators.

**1.3 Details of the supplier of the safety data sheet:** Flash-Butrym Sp.J. Lubieszyn 4E; 72-002 Dołuje; Poland, Tel. 48 608 691 263, e-mail: [biuro@flash-butrym.pl](mailto:biuro@flash-butrym.pl); [www.flash-butrym.pl](http://www.flash-butrym.pl), person responsible for the SDS: [biuro@flash-butrym.pl](mailto:biuro@flash-butrym.pl)

**1.4 Emergency telephone number:** 112 lub 998, Office of toxicological information: (058)349-28-31 lub (058)301-65-16

### SECTION 2. HAZARDS IDENTIFICATION

**2.1. Classification of the substance or mixture**

Classification according to Regulation (EC) No 1272/2008 of 16 December 2008. On classification, labeling and packaging (CLP).

Overall risk:

The product is not classified as hazardous under applicable regulations.

Health Hazards:

Not applicable.

Hazardous properties:

Not applicable.

Environmental Hazards:

Not applicable.

**2.2. Label elements (based on Regulation (EC) No 1272/2008)**

**Hazard pictogram:**

Lack.

**Signal word:**

Lack.

**Hazard statements:**

H000 - the product is not classified as hazardous under applicable regulations.

**Phrases determining conditions of safe use:**

Lack.

**2.3. Other hazards:**

May cause slight eye irritation.

Components of the mixture do not meet the criteria for PBT or vPvB in accordance with Annex XIII of REACH.

### SECTION 3. COMPOSITION / INFORMATION ON INGREDIENTS

**3.1. Substances**

Not applicable

**3.2. Mixtures**

**Ingredients (according to 648/2004 / EC):** water, propylene glycol

The name of the substance	Concentration [Wt.%]	Numbers			Classification
		CAS/ WE	Indeksowy	Rejestracji	Wg 1272/2008 (CLP)
propylene glycol	≤ 10	57-55-6 200-338-0	_____	01- 2119456809- 23-XXXX	Not applicable

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triethylene glycol	≤ 10	112-27-6		01- 2119438366- 35-XXXX	Not applicable
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The full text of the H-Statements and R are in Section 16.

### **SECTION 4. FIRST AID MEASURES**

#### **4.1. Description of first aid**

**Inhalation** - In case of inhalation poisoning symptoms (cough, shortness of breath, dizziness) move to fresh air. Consult your doctor in case of alarming symptoms.

**Skin** - In case of contact with the skin, rinse thoroughly with soap and water.

**Eyes** - eyes, rinse with plenty of cold water (at least during 15 minutes) keep the eyes open, seek medical advice

**Ingestion** - If swallowed, do not induce vomiting. Drink plenty of water. Do not give antacids. In case of alarming symptoms, consult a doctor, if possible, show the label.

#### **4.2. Acute and delayed symptoms and effects of exposure**

**Skin** - in people predisposed to allergies can cause skin irritation

**Eyes** - in the case of contact may cause irritation

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

Seek medical attention. At the workplace needed access to fresh water and preparation to eye wash.

### **SECTION 5. FIRE FIGHTING MEASURES**

#### **5.1. Extinguishing media**

Suitable extinguishing media: fires in the presence of the preparation extinguish with extinguishing media suitable for burning environment - extinguishing powder, alcohol-resistant foam, carbon dioxide. Do not use water in full stream.

#### **5.2. Special hazards arising from the substance or mixture**

Under the influence of heat (fire) combustible vapors which form explosive mixtures with air are formed. Products of incomplete combustion may contain carbon monoxide and other toxic gases. Mists or aerosols may ignite below the normal ignition temperature. Product vapors are heavier than air.

#### **5.3. Advice for firefighters**

Use breathing apparatus and protective clothing. In case of fire inform all persons nearby, remove bystanders from the danger area, notify the fire brigade. If possible remove the containers with the preparation away from the influence of fire and high temperatures. If this is not possible then cool the container near the fire by spraying water jet. The after burning residues should be removed completely.

### **SECTION 6. ACCIDENTAL RELEASE TO THE ENVIRONMENT PROCEDURE**

#### **6.1. Personal precautions, protective equipment and emergency procedures**

For non-emergency personnel: wear protective gloves, safety glasses / goggles.

For emergency responders: work clothes protective gloves, safety glasses / goggles.

#### **6.2. Precautions for environmental protection**

Prevent from spreading or entering into drains, watercourses. In the case of water or soil pollution, inform the relevant departments.

#### **6.3. Methods and materials for preventing the spread of contamination and removing the effects of contamination**

In case of unintended release substance into environment inform on emergency and remove the source of ignition. Secure the drains through their embankments, do not allow to penetrate the preparation of surface water and groundwater; Avoid direct contact with the released substance. As far as possible eliminate the leak (close liquid flow, make tight, place the damaged container in an airtight protective packaging). In case of large spill embank the place of the liquid accumulation, pump out the collected liquid. Small quantity of leak absorb by inflammable absorbing material (sand, earth, sawdust, diatomaceous earth, ground limestone), then place in a labeled, sealable container – send for recycling. Polluted surface wash.

#### **6.4. Reference to other sections**

Information on appropriate personal protective equipment specified in Section 8.

Information regarding waste treatment specified in Section 13.

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### **SECTION 7. HANDLING SUBSTANCES AND MIXTURES AND STORAGE PROCEDURES**

#### **7.1. Precautions for safe handling**

While working with the preparation, caution is advised. Require use of appropriate personal protective equipment - see section 8.

People with a tendency to skin or respiratory system allergy should not have contact with the product.

After usage close the container tightly, keep away from unauthorized persons.

During operation with substances ensure good ventilation.

#### **7.2 Conditions for safe storage, including information about any incompatibilities**

Keep only in original container made from plastic (polyethylene with the high quality of HDPE). Do not pour to replaceable containers. Keep the container in dry, tightly closed rooms with temperature + 5 ÷ 35 ° C with the good ventilation, equipped with easily washable, nonabsorbent floor. Protect from sun and heat. Keep away from sources of ignition and open fire.

#### **7.3. Specific use(s)**

No data

### **SECTION 8. EXPOSURE CONTROL / PERSONAL PROTECTION**

#### **8.1. Control parameters**

Minister of Labour and Social Policy of 6 June 2014 on maximum permissible concentration and intensity of harmful factors in the work environment (Dz. U. 2014 pos. 817)

**NDS and NDSCh values for individual chemicals (data according to the data sheet or the chemical safety report):**

**Propylene glycol (data for the concentrated substance):**

Not determined

**DNEL, PNEC values for individual chemicals (data according to the data sheet or the chemical safety report):**

**Propylene glycol (data for the concentrated substance):**

DNEL value for workers in conditions of prolonged exposure - local effects: After inhalation of 10 mg / m<sup>3</sup>

DNEL value for workers in conditions of prolonged exposure - systemic effects: inhalation of 168 mg / m<sup>3</sup>

DNEL value for consumers in terms of long-term exposure - local effects: After inhalation of 10 mg / m<sup>3</sup>

DNEL value for consumers in terms of long-term exposure - systemic effects: inhalation: 50 mg / m<sup>3</sup>

PNEC value for the freshwater environment: 260 mg / l

PNEC value for the environment for sea water: 26 mg / l

PNEC value for sediment and fresh water: 572 mg / kg

PNEC value for sediment and marine waters: 57.2 mg / kg

PNEC value for soil environment: 50 mg / kg

PNEC STP value 20000 mg / l

PNEC value oral 1133 mg / kg

Recommendations to the procedure of monitoring hazardous substances in air - method of measurements:

- Regulation of the Minister of Health on 2 February 2011 on tests and measurements of health hazard factors in the work environment (Dz. U. 2011 No. 33, item. 166).

- PN-89 / Z-01001/06 - Air protection against pollution. The names, definitions and units. Terminology concerning air quality tests at the workplace.

- PN-89 / Z-04008/07 - Air purity protection. Sampling. Principles of air sampling in work environment and interpretation of results.

- PN-EN-689: 2002 - Workplace atmospheres - Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy.

Note: When the concentration of the substance is determined and known, personal protection should be made taking into account the concentration of the substance occurring at the workplace, exposure time and operations performed by the employee. In an emergency, if the concentration of the substance at the workplace is unknown, personal protection of high protection class.

#### **8.2. Exposure control**

Used personal protection should comply with the Regulation of the Minister of Economy of 21 December 2005 on essential requirements for personal protective equipment (Dz. U. No. 259, item. 2173):

**RESPIRATORY PROTECTION:** Not required.

**HAND PROTECTION:** Not required.

**EYE PROTECTION:** Not required.

**SKIN PROTECTION:** Not required.

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### **SECTION 9. PHYSICAL AND CHEMICAL CHARACTERISTICS**

#### **9.1. Information on basic physical and chemical properties**

APPEARANCE - colorless liquid

SMELL - odorless

ODOR THRESHOLD – not determined

pH - no data available

MELTING / FREEZING TEMPERATURE: not determined

INITIAL BOILING POINT AND BOILING RANGE: not determined

FLASH POINT: not determined

EVAPORATION RATE: not determined

FLAMMABILITY (SOLID, GAS): not determined

UPPER / LOWER FLAMMABILITY LIMIT OR UPPER / LOWER EXPLOSIVE LIMITS: not determined

VAPOR PRESSURE: not determined

AVAILABLE VAPOR PRESSURE: not determined

RELATIVE DENSITY: 1.000 ± 0.020 g / cm<sup>3</sup>

SOLUBILITY:

a) WATER - full

b) ORGANIC SOLVENT - no

PARTITION COEFFICIENT n-octanol / water - no

AUTO IGNITION TEMPERATURE: not determined

DECOMPOSITION TEMPERATURE: not determined

VISCOSITY: not determined

EXPLOSIVE PROPERTIES: not determined

OXIDIZING PROPERTIES: not determined

#### **9.2. Other information**

INDEX OF REFRACTION - not determined

\* - Presented as weight % of sucrose content in the aqueous solution

### **SECTION 10. STABILITY AND REACTIVITY**

#### **10.1 Reactivity**

No data

#### **10.2 Chemical stability**

Under normal storage chemically stable (see section 7).

#### **10.3 Possibility of hazardous reactions**

No data

#### **10.4 Conditions to avoid:**

Strong heated rooms without ventilation. Protect from long term exposure on light.

#### **10.5 Incompatible materials:**

Materials to be avoided: strong oxidizing agents, strong acids, isocyanates

#### **10.6 Hazardous decomposition products:**

In the case of combustion: carbon monoxide

### **SECTION 11. TOXICOLOGICAL INFORMATION**

#### **11.1. Information on toxicological effects**

##### **EXPOSURE THROUGH:**

- **INHALATION:** does not cause irritation of the upper respiratory tract.
- **INGESTION:** if swallowed can cause irritation of mucous membranes.
- **SKIN CONTACT:** in people prone to allergies can cause skin irritation
- **EYE CONTACT:** in case of contact may cause irritation.

##### **INFORMATION RELATING TO MIXTURE COMPONENTS (by PARTICULAR SUBSTANCE DATA SHEET):**

###### **Propylene glycol (data for the concentrated substance):**

LD50 22000 mg/kg (Acute oral toxicity, rat).

LD50 >2000 mg/kg (Acute toxicity dermal, rabbit).

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LC50 >317 mg/l/2h (inhalation, rabbit)

Local effects:

Skin: not irritating.

Eyes: not irritating.

Non allergic.

Mutagenic:

Not mutagenic in in vitro assays.

Carcinogenesis: Long-term studies in rodents and dogs showed no carcinogenic.

Adverse effects on reproduction: not toxic to fertility and development.

Toxic effects on target organs - single exposure: no data available

Aspiration hazard: no data available

### **SECTION 12. ECOLOGICAL INFORMATION**

#### **12.1. Toxicity**

The data for the components of the mixture:

**Propylene glycol (data for the concentrated substance):**

- Fish: LC50 40613 mg/l/96h.

- Daphnia: EC50 18340 mg/l/48h, 18800 mg/l/96h

- Algae: EC50 19100 mg/l/72h, 19000 mg/l/96h

- Bacteria: NOEC 20000 mg/l/96h

#### **12.2. Persistence and degradability**

The data for the components of the mixture:

**Propylene glycol (data for the concentrated substance):**

Product is readily biodegradable under aerobic conditions.

The degradation may take place slowly under anaerobic conditions.

#### **12.3. Potential for bioaccumulation**

The data for the components of the mixture:

**Propylene glycol (data for the concentrated substance):**

Bioconcentration potential is low (BCF > 100 or Log Pow < 3)

logPow partition coefficient: 1.07

BCF bioconcentration factor: 0.09

#### **12.4. Mobility in soil**

After reconstitution, the product may penetrate into the groundwater.

#### **12.5. The results of the assessment of the PBT and vPvB**

Components of the mixture do not meet the criteria for PBT or vPvB in accordance with Annex XIII of REACH

#### **12.6. Other adverse effects**

No data available

### **SECTION 13. DISPOSAL CONSIDERATIONS**

#### **RESIDUES OR WASTES:**

Do not mix the substance with other liquid wastes. Do not discharge into the drains.

Waste code and type: 07 06 04 - other organic solvents, washing liquids and mother liquors.

Code classification pursuant to the Ordinance of the Minister of the Environment of 9 December 2014 on waste catalog (Dz. U. 2014, item. 1923)

#### **13.1. Waste treatment methods**

Contaminated packaging should be emptied. Empty container rinse with water several times and use it in the same way as preparation. Empty packaging can be stored in a place intended for collecting the plastic or refer to company specialized in utilization.

Observe the provisions of the Act of 14 December 2012 on waste (Dz. U. 2013, pos. 21, as amended)

Observe the provisions of the Act of 13 June 2013 on packaging and packaging waste (Dz. U. 2013, pos. 888).

Waste code and type: 15 01 02 - plastic packaging

### **SECTION 14. TRANSPORT INFORMATION**

TRADE NAME: **LIQUID FOR ARTIFICIAL SMOKE GENERATOR**

## ***LIQUID FOR ARTIFICIAL SMOKE GENERATOR***

- 14.1. UN number:** not applicable  
**14.2. UN proper shipping name:** not applicable  
**14.3. Transport hazard Class(es):** not applicable  
**14.4. Packaging group:** not applicable  
**14.5. Environmental hazards:** NO  
**14.6. Special precautions for user:** see sections 6 and 8  
**14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code:** no data

**WARNING LABEL:** not applicable

### **SECTION 15. REGULATORY INFORMATION**

#### **15.1. Legislation on safety, health and environment protection specific for the substance or mixture**

##### **Polish legal acts:**

- The Act of 29 July 2005 on preventing drug addiction (Dz. U. No 179, item. 1485, as amended)
- The Act of 13 September 2002 on biocidal products (Dz. U. No 175, item. 1433, as amended)
- The Act of 14 December 2012 on waste (Dz. U. 2013, pos. 21, as amended)
- The Act of 13 June 2013 on packaging and packaging waste (Dz. U. 2013, pos. 888)
- Regulation of the Minister of the Environment of 9 December 2014 on waste catalog (Dz. U. 2014, item. 1923)
- The Act of 26 June 1974, The Labour Code (Dz. U. No. 21 of 1998, pos. 94, as amended)
- Regulation of the Minister of Health on 2 February 2011 on tests and measurements of health hazard factors in the work environment (Dz. U. 2011 No. 33, item. 166, as amended)
- Regulation of the Minister of Labour and Social Policy of 6 June 2014 on maximum permissible concentration and intensity of harmful factors in the work environment (Dz. U. 2014 pos. 817)
- Regulation of the Minister of Economy of 21 December 2005 on essential requirements for personal protective equipment (Dz. U. No. 259, item. 2173)

##### **EU legal acts:**

- Commission Regulation (EU) No 453/2010 of 20 May 2010 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH)
- Regulation (EC) No 648/2004 of the European Parliament and of the Council of 31 March 2004 on detergents
- Commission Regulation (EC) No 907/2006 amending Regulation (EC) No 648/2004 of the European Parliament and of the Council on detergents, in order to adapt Annexes III and VII
- Regulation of the European Parliament and Council Regulation (EC) No 1336/2008 of 16 December 2008 amending Regulation (EC) No 648/2004 in order to adapt it to Regulation (EC) No 1272/2008 on classification, labeling and packaging of substances mixtures.
- Commission Regulation (EC) No 551/2009 of 25 June 2009 amending Regulation (EC) No 648/2004 of the European Parliament and of the Council on detergents, in order to adapt Annexes V and VI thereto (derogation for surfactants)
- Regulation of the European Parliament and of the Council (EU) No 259/2012 of 14 March 2012 amending Regulation (EC) No 648/2004 as regards the use of phosphates and other phosphorus compounds in consumer laundry detergents and consumer automatic dishwasher detergent
- Regulation (EC) No 273/2004 of the European Parliament and of the Council of 11 February 2004 on drug precursors
- Regulation (EC) No 1272/2008 OF The European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006

#### **15.2. Chemical Safety Assessment**

For mixture the chemical safety assessment has not been made.

For the following mixture substances:

**Propylene Glycol:** exposure scenario is not required.

### **SECTION 16. OTHER INFORMATION**

The above information is based on our current state of art and product as it is used. Data concerning this product are presented in order to take account of safety requirements and not to guarantee its special properties. If the use conditions are not under the control of the manufacturer, the responsibility for safety use lies with the user.

The employer is obliged to inform all employees who have contact with the product, about the dangers and safety measures specified in this safety data sheet.

This safety data sheet has been prepared on the basis of the data sheets of raw materials contained in the composition of the mixture supplied by the manufacturers / suppliers and on the basis of regulations on hazardous chemical substances and mixtures thereof.

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The full text of phrases H and R from section 2 and 3:  
Not applicable

**Training:** Participants in the hazardous substances marketing should be trained in the handling, safety and hygiene. Drivers should be trained and obtain proper certification in accordance with the requirements of ADR.

**Date of expiry in normal conditions - 36 months from the date of production.**

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