

Safety Data Sheet

Revision date: 16-August 2017

replaces all previous editions

BIOFUME GREENHOUSE SMOKE GENERATOR

1. IDENTIFICATION OF THE SUBSTANCE / PREPARATION AND COMPANY OR UNDERTAKING

Identification of the substance or preparation

1.1. Tradename: BIOFUME GREENHOUSE SMOKE GENERATOR

1.2. Formulation type: Smoke Generator

1.3. Company identification

Company Octavius Hunt Ltd
Redfield, BRISTOL, BS5 9NQ, UK
Phone +44 (0) 117 955 5305
Fax +44 (0) 117 955 7875
Website www.octavius-hunt.co.uk

1.4. Emergency Phone + 44 (0) 7720 051020 (24h)

2. HAZARDS IDENTIFICATION

2.1. Classification of the mixture

Directive 1271/2008 (CLP/GHS) Classification

Hazard classes and Harzard Categories.	Hazard Statements	Classification procedure
Aquatic Chronic 3	H412	

Hazard Statements

H412 Harmful to aquatic

2.2. Labels

Labelling according to Regulation (EC) No 1272/2008 (CLP/GHS)

Hazard Statements

H412 Harmful to aquatic life with long lasting effects

Precautionary Statements

P101 If medical is needed, have product container or label at hand
P102 Keep out of reach of children
P273 Avoid release to the environment
P501 Dispose of contents/container to proper disposal

2.3. Other Hazards

Keep away from surface waters.

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substances:

N.A.

3.2. Mixture

Description

Repellent
Smoke generator containing
natural oil.

Hazardous Components

CAS No.	Hazardous ingredients	Conc.	Class (EC) No 1272/2008 [CLP]
3811-04-9	Potassium chlorate	10 -20% w/w	Signal word Danger Hazard statement(s) H271 May cause fire or explosion; strong oxidiser. H302 Harmful if swallowed. H332 Harmful if inhaled. H411 Toxic to aquatic life with long lasting effects.

Information to exposure limit values - see section 8.

4. FIRST AID MEASURES

General advice: Remove contaminated, soaked clothing immediately and dispose of safely.

4.1. First Aid Measures

Eye contact: Immediately irrigate with clean water, holding the eyelids apart, for at least 15 minutes. Obtain immediate medical attention.

Skin contact: Take off immediately all contaminated clothing. Wash skin immediately with water, followed by soap and water. Such action is essential to minimise contact with skin. If symptoms persist or in all cases of doubt seek medical advice.

Inhalation: Remove patient from exposure, keep warm and at rest. Obtain medical attention as a precaution.

Ingestion: If swallowed wash out mouth with water, seek medical advice immediately and show the container, label or this Data Sheet, if possible. Do not induce vomiting.

4.2. Symptoms and effects

Medical advice

Symptoms: Local: May cause skin and eye irritation. Inhalation may provoke the following symptoms: irritation, cough.

Symptoms: Systemic: excitement, gastrointestinal discomfort, tremor, Dizziness, headache, listlessness, nausea and vomiting, epigastric pain.

Risks: This product/preparation contains a Potassium Chlorate

4.3. Immediate Medical Attention

Treatment:

No specific antidote know. Treatment: symptomatic

5. FIRE FIGHTING MEASURES

Highly flammable. Ignites readily. Oxidising agent; may assist combustion.

Keep fire exposed containers cool by spraying with water.

5.1. Extinguishing media: For small fires, use foam, carbon dioxide or dry powder extinguishant. For large fires, use foam or water-fog; avoid use of water jet. Contain run-off water with, for example, temporary earth barriers.

5.2. Special Hazards: Irritant fumes can be produced during combustion

5.3. Protective Equipment: A self-contained breathing apparatus and suitable protective clothing should be worn in fire conditions.

6. ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions: Ensure suitable personal protection during removal of spillages. This means wearing a dustmask, eye protection, chemically resistant gloves (e.g. 0.6 mm nitrile), boots and coveralls. See also Section 8.

6.2. Clean up methods: Cover spillage with moist sand or soil. Transfer to a container for disposal. Wash the spillage area with water. Washings must be prevented from entering surface water drains.

6.3. Environmental precautions: Spillages or uncontrolled discharges into watercourses must be alerted to the appropriate regulatory body.

7. HANDLING AND STORAGE

7.1. Handling

Read the label before use.

Do not breathe smoke. Avoid contact with skin and eyes. When using do not eat, drink or smoke. Wash face and hands before eating, drinking or smoking.

7.2. Storage

Keep in original containers, tightly closed, out of reach of children. Keep away from food, drink and animal feeding stuffs. Protect from frost.

Storage Life: Physically and chemically stable for at least 2 years when stored in the original unopened sales container at ambient temperatures.

Storage group 4.1B

7.3. End Use

Repellent Smoke Generator

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1. Exposure Controls

Occupational exposure limits; Hazardous ingredients; Not applicable to field use
Potassium chlorate MANUFACTURERS Standard, 8 hr TWA, 5 mg/m³. Not applicable to field use.

8.2. Personal Protection

When using this product refer to the label for details. In all other cases, use the following Personal Protective Equipment:

Respiratory protection: Wear suitable respiratory protective equipment if exposure to levels above the occupational exposure limit is likely. Respiratory protective equipment should conform to the appropriate EN standard.

Eye protection: Wear suitable eye/face protection conforming to EN 166.

Hand protection: Wear suitable gloves conforming to EN 374.

Body protection: Wear suitable protective clothing.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Colour:	Off-white.
Physical State:	Powder in polypropylene container.
Odour:	Characteristic garlic
Melting Point:	Not applicable.
Boiling point:	Not applicable.
Flash-Point:	Does not flash.
Autoignition temperature	Not available.
Minimum Ignition temp.	>130 °C
Minimum Ignition:	Not available
Oxidizing properties:	Oxidising agent; may assist combustion.
Energy Explosive properties	Not applicable
Vapour pressure:	Not available.
Solubility:	Partly soluble in/with water.
pH-value (quant.):	Not available.
Partition coeff. (n-octanol/water):	Log Pow: 5.95
Density:	Not available.

9.2 Other information

No information available

10. STABILITY AND REACTIVITY

10.1 Reactivity: Reacts violently with reducing agents producing toxic and explosive gases

10.2 Chemical stability: Stable at normal conditions

10.3 Possibility of hazardous reaction: Reacts violently with reducing agents producing toxic and explosive gases

10.4 Condition to avoid: Heat and ignition sources

10.5 Incompatible materials: The product is incompatible with strong reducing agents and acids

10.6 Hazardous decomposition products: Combustion or thermal decomposition will evolve harmful and irritant vapours.

11. TOXICOLOGICAL INFORMATION

Acute Oral Toxicity

LD50 (rat) ca. 2000 mg/kg

Test substance: Information given is based on data on the components and the toxicology of similar products.

Acute Inhalation Toxicity <http://www.sigmaaldrich.com/customer-service/quality-systems.html>

LC50 (rat) > 4.2 mg/l Exposure time : 4h

Remarks: Irritating to respiratory system

Acute Dermal Toxicity

LD50 (rat) >2000 mg/kg

Test substance: Information given is based on data on the components and the toxicology of similar products.

Skin Irritation

Rabbit

Result: No skin irritation

Eye Irritation

Rabbit

Result: Irritating to eyes

Further Information

Cutaneous sensations may occur, such as burning or stinging on the face and mucosae. However, these sensations cause no lesions and are of a transitory nature (max. 24 hours).

12. ECOLOGICAL INFORMATION

Use following good practice, avoid to spread it in the environment (see also 6,7,13,14 e 15 sections)

12.1 Toxicity

Toxicity to algae static test EC50 - Nitzschia closterium - 2.8 mg/l - 72

12.2 Persistence and degradability

No data available.

12.3 Bioaccumulative potential

No data available.

12.4 Mobility in soil

No data available.

12.5 Results of PBT e vPvB assessment

Potassium Chlorate: it is not PBT and vPvB

12.6 Other adverse effects:

Toxic to aquatic life with long lasting effects.

13. DISPOSAL CONSIDERATIONS

13.1. Product: In accordance with current regulations may be taken to waste disposal site or incineration plant, after consultation with site operator and/or with the responsible authority.

Can be land filled or incinerated, when in compliance with local regulations.

Advice may be obtained from local waste regulation authority (part of the Environment Agency in the UK)

13.2. Contaminated Packaging: packaging that cannot be cleaned should be disposed of as product waste.

Empty containers can be land filled after cleaning, when in compliance with the Environmental Protection (Duty of Care) Regulations 1991.

14. TRANSPORT INFORMATION

Rail / Road (RID / ADR)	Class	UN Number	Packaging Group	Kemmler Index	
Proper Shipping Name	Not classified as hazardous for transport				
Sea (IMDG-Code)	Class	UN Number	Packaging Group	EMS	MFAG
Proper Shipping Name Marine pollutant	Not classified as hazardous for transport No				
Air (ICAO / IATA)	Class	UN Number	Packaging Group		
Proper Shipping Name	Not classified as hazardous for transport				

15. REGULATORY INFORMATION

15.1 Relevant Legislation

REACH Directive (EU) 2015/830 amending Regulation (EC) No 1907/2006

CLP-Regulation 790/2009/EC amending Regulation 1272/2008/EC

Chemical Agents Directive 98/24/EC

15.2 Chemical safety assessment

N.A.

16. OTHER INFORMATIONS

H271	May cause fire or explosion; strong oxidizer
H302	Harmful if swallowed
H332	Harmful if inhaled
H411	Toxic to aquatic life with long last effects

This information is based on our present state of knowledge and according to the last labeling regulation. Do not use the mixture in way different to the one described in the 1 section, without previous written authorization.
