

### Safety Data Sheet

Revision date:22-November-2016

replaces all previous editions

## ENCAPSULATED SMOKE PELLET

# SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

#### 1.1 Product identifier

Supplier

Trade name ENCAPSULATED SMOKE PELLET

1.2 Relevant identified uses of the substance or mixture and uses advised against Use A smoke generation pellet for the marking of airflows, for theatrical or special effects

#### 1.3 Details of the supplier of the safety data sheet

Arctic Hayes Ltd Glover Way Leeds LS11 5JP UK

| Telephone | +44 (0) 113 271 5245   |
|-----------|------------------------|
| Telefax   | +44 (0) 113 271 5779   |
| Email     | sales@arctic-hayes.com |

#### 1.4 Emergency telephone no.

Emergency telephone no. +44 (0) 113 271 5245

#### SECTION 2: HAZARD IDENTIFICATION

#### 2.1 Classification of the substance or mixture

Classification in accordance with Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures, as amended. Acute toxicity: Category 4 H302 Harmful if swallowed. Skin sensitisation: Category 1 H317 May cause an allergic skin reaction.

Eye irritation: Category 2 H319 Causes serious eye irritation. Specific target organ toxicity - single exposure: Category 3 H335 May cause respiratory irritation. Acute aquatic toxicity: Category 1 H400 Very toxic to aquatic life. Chronic aquatic toxicity: Category 1 H410 Very toxic to aquatic life with long lasting effects.

#### Classification accordind to EU Directives 67/548/EEC or 1999/45/EC

Xn Harmful, R22 Xi Irritant, R36/37 N Dangerous for the environment, R50/53

#### 2.2 Label elements

Labelling in accordance with Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures, as amended.

Hazard label for supply/use required:

Hazardous components which must be listed on the label:

- Ammoniun chloride
- Potassium chlorate



H302 Harmful if swallowed.
H319 Causes serious eye irritation.
H412 Harmful to aquatic life with long lasting effects.
EUH401 To avoid risks to human health and the environment, comply with the instructions for use.
Precautionary statements
P102 Keep out of reach of children
P210 Keep away from heat/sparks/open flames/hot surfaces – No smoking
P260 Do not breathe smoke

P273 Avoid release to the environment

P308 + P311 IF exposed or concerned: Call a POISON CENTER/ doctor/ physician.

#### 2.3 Other hazards

Ignites readily. Product burns without a flame to give a dense white harmful smoke.

#### SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

#### 3.2 Mixtures

Chemical nature Smoke pellet

#### Hazardous components

R-phrase(s) according to EC directive 67/548/EEC Hazard statements according to Regulation (EC) No. 1907/2006

| Name                  | CAS-No. /<br>EC-No.     | EC Directive<br>67/548/EEC        | Regulation (EC)<br>No 1272/2008   | Concentration<br>[%] |
|-----------------------|-------------------------|-----------------------------------|---|----------------------|
| Ammonium<br>Chloride  | 12125-02-9<br>235-186-4 | Xn; R22 - R36                     | Acute Tox. 4;<br>Eye Irrit. 2;<br>H302, H319  | > 2.50 - < 25.00     |
| Potassium<br>Chlorate | 3811-04-9<br>223-289-7  | O; R 9<br>Xn; R20/22<br>N; R51/53 | Ox. Sol. 1, H271<br>Acute Tox. 4,<br>H332<br>Acute Tox. 4,<br>H302 Aquatic<br>Chronic 2, H411 | > 2.50 - < 25.00     |

#### Further information

For the full text of the R-phrases/ Hazard statements mentioned in this Section, see Section 16.

#### SECTION 4: FIRST AID MEASURES

4.1 Description of first aid measures

#### General advice

Consult a physician. Show this safety data sheet to the doctor in attendance.

#### If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

#### In case of skin contact

Wash off with soap and plenty of water. Consult a physician.

#### In case of eye contact

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

#### If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician

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

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

#### **4.3 Indication of any immediate medical attention and special treatment needed** No data available

#### SECTION 5: FIREFIGHTING MEASURES

#### 5.1 Extinguishing media

**Suitable extinguishing media** Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

#### Unsuitable extinguishing media High volume water iet

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

Dangerous gases are evolved in the event of a fire. Contains potassium chlorate which is classified as an oxidising agent.

#### 5.3 Advice for firefighters

#### Special protective equipment for fire-fighters

In the event of fire, wear self-contained breathing apparatus.

#### **Further information**

Remove product from areas of fire, or otherwise cool containers with water in order to avoid pressure being built up due to heat.

Whenever possible, contain fire-fighting water by diking area with sand or earth.

#### SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Keep people away from and upwind of spill/leak.

Avoid dust formation.

Avoid contact with spilled product or contaminated surfaces.

When dealing with a spillage do not eat, drink or smoke.

#### 6.2 Environmental precautions

Do not allow to get into surface water, drains and ground water. If spillage enters drains leading to sewage works inform local water company immediately. If spillage enters rivers or watercourses, inform the Environment Agency (emergency

telephone number 0800 807060).

#### 6.3 Methods and materials for containment and cleaning up

#### Methods for cleaning up

The nature of this product, when contained in commercial packs, makes spillage unlikely. However, if significant amounts are spilled nevertheless, the following advice is applicable. Clean contaminated floors and objects thoroughly, observing environmental regulations. Sweep up or vacuum up spillage and collect in suitable container for disposal.

#### Additional advice

Check also for any local site procedures.

#### 6.4 Reference to other sections

Information regarding safe handling, see section 7. Information regarding personal protective equipment, see section 8.

Information regarding waste disposal, see section 13.

#### SECTION 7: HANDLING AND STORAGE

#### 7.1 Precautions for safe handling

#### Advice on safe handling

No specific precautions required when handling unopened packs/containers; follow relevant manual handling advice. Avoid dust formation. Ensure adequate ventilation.

#### Advice on protection against fire and explosion

Dust may form explosive mixture in air.

#### Hygiene measures

When using, do not eat, drink or smoke. Remove soiled clothing immediately and clean thoroughly before using again. Contaminated work clothing should not be allowed out of the workplace. Wash hands thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, using the toilet or applying cosmetics. Wash hands immediately after work, if necessary take a shower.

#### 7.2 Conditions for safe storage, including any incompatibilities

**Requirements for storage areas and containers** Store in a place accessible by authorized persons only. Keep away from direct sunlight. Keep containers tightly closed in a dry, cool and well-ventilated place.

#### Advice on common storage

Keep away from food, drink and animal feedingstuffs.

#### Suitable materials

Polyethylene film within an outer package

#### 7.3 Specific end uses

Refer to the label and/or leaflet.

#### SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

#### 8.1 Control parameters

| Component            | CAS-No.    | Value | Control<br>parameters | Basis  |
|----------------------|------------|-------|-----------------------|--|
| Ammonium<br>chloride | 12125-02-9 | TWA   | 10 mg/m3              | UK. EH40 WEL<br>- Workplace<br>Exposure Limits |

#### 8.2 Exposure controls

Refer to COSHH assessment (Control of Substances Hazardous to Health (Amendment) Regulations 2004). Engineering controls should be used in preference to personal protective equipment wherever practicable. Refer also to COSHH Essentials.

#### Personal protective equipment

In normal use and handling conditions please refer to the label and/or leaflet. In all other cases the following recommendations would apply.

#### Respiratory protection

Wear respirator with a particle filter mask (protection factor 4) conforming to European norm EN149FFP1 or equivalent. Respiratory protection should only be used to control residual risk of short duration activities, when all reasonably practicable steps have been taken to reduce exposure at source e.g. containment and/or local extract ventilation. Always follow respirator manufacturer's instructions regarding wearing and maintenance.

#### Hand protection

Wear CE Marked (or equivalent) nitrile rubber gloves (minimum thickness 0,40 mm). Wash when contaminated. Dispose of when contaminated inside, when perforated or when contamination outside cannot be removed. Wash hands always before eating, drinking, smoking or using the toilet.

Eve protection Wear goggles conforming to EN166 (Field of Use 5 or equivalent).

#### Skin and body protection

Wear standard coverall and type 4 suit.

Wear two layers of clothing wherever possible. Polyester/cotton or cotton overalls should be worn under chemical protection suit and should be professionally laundered frequently.

#### SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

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

| Colour:<br>Physical State:<br>Odour: | Off-white.<br>Compressed pellet.<br>Odourless |
|--------------------------------------|---|
| 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-                 | Not applicable                                |
| octanol/water):                      |   |
| Density:                             | Not available.                                |

#### 9.2 Other information

Further safety related physical-chemical data are not known

#### SECTION 10: STABILITY AND REACTIVITY

#### 10.1 Reactivity

Stable under normal conditions.

#### 10.2 Chemical stability

Stable under recommended storage conditions.

#### 10.3 Possibility of hazardous reactions

No hazardous reactions when stored and handled according to prescribed instructions.

#### 10.4 Conditions to avoid

Extremes of temperature and direct sunlight. Heat, flames and sparks.

**10.5 Incompatible materials** Store only in the original container.

**10.6 Hazardous decomposition products** No decomposition products expected under normal conditions of use

**SECTION 11: Toxicological information** 

#### 11.1 Information on toxicological effects

Acute toxicity LD50 Oral - rat - 730 mg/kg Remarks: Behavioural: Altered sleep time (including change in righting reflex). Behavioural: Muscle contraction or spasticity. Behavioural: Irritability.

Skin corrosion/irritation Skin - rabbit Result: Severe skin irritation

#### Serious eye damage/eye irritation Moderate eye irritation

#### Respiratory or skin sensitisation No data available

Germ cell mutagenicity No data available

#### Carcinogenicity

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

#### Reproductive toxicity No data available

Specific target organ toxicity - single exposure Inhalation - May cause respiratory irritation. Specific target organ toxicity - repeated exposure No data available

#### Aspiration hazard No data available

#### Additional Information

RTECS: Not available

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

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#### **SECTION 12: Ecological information**

#### 12.1 Toxicity

Un-burned composition is non-selectively toxic to plants

#### **12.2 Persistence and degradability** Not readily biodegradable

**12.3 Bioaccumulative potential** No data available

**12.4 Mobility in soil** No data available

#### 12.5 Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

**12.6 Other adverse effects** Harmful to aquatic organisms

#### SECTION 13: DISPOSAL CONSIDERATIONS

#### 13.1 Waste treatment methods

**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)

**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.

#### SECTION 14: TRANSPORT INFORMATION

| Rail / Road (RID / ADR)                  | Class               | UN<br>Number   | Packaging<br>Group | Kemmler Index |      |
|--|---------------------|----------------|--------------------|---------------|------|
| Proper Shipping Name                     | Not subj            | ect to the pro | ovisions of ADF    | R             |      |
| Sea (IMDG-Code)                          | Class               | UN<br>Number   | Packaging<br>Group | EMS           | MFAG |
| Proper Shipping Name<br>Marine pollutant | Non Hazardous<br>No |                |                    |               |      |
| Air (ICAO / IATA)                        | Class               | UN<br>Number   | Packaging<br>Group |               |      |
| Proper Shipping Name                     | Not restr           | icted          |                    |               |      |

#### SECTION 15. REGULATORY INFORMATION

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

Further information WHO-classification: III (Slightly hazardous)

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

A Chemical Safety Assessment is not required for this substance.

#### 16. OTHER INFORMATION

#### **Further information**

#### Text of R-phrases mentioned in Section 3

R20/22 Harmful by inhalation and if swallowed.
 R36 Irritating to eyes
 R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

#### Text of the hazard statements mentioned in Section 3

H302 Harmful if swallowed.

H319 Causes serious eye irritation

H332 Harmful if inhaled.

H411 Toxic to aquatic life with long lasting effects.

The above information is intended to give general health and safety guidance on the storage and transport of the product.

The information contained herein is based on the present state of our knowledge and is intended to describe our products from the point of view of safety requirements. It should not therefore be construed as guaranteeing specific properties.