

SAFETY DATA SHEET

September 2019

SECTION 1 – PRODUCT IDENTIFICATION

1.1 Product identifier

Product Name: FLAMES

1.2 Relevant identified uses of the substance or mixture and uses advised against

Relevant identified uses: Articles pyrotechnic for technical purposes

For indoor use

1.3 Details of the Supplier of the Safety Data Sheet

Supplier: Le Maitre Ltd

Street/P.O. Box: 6 Forval Close Postcode/City: CR4 4NE, Mitcham

Country: England

Telephone number: +44 (0)20 8646 2222

Email: info@lemaitreltd.com

1.4 Emergency telephone number

Please contact: +44 (0)151 951 3317 Health and Safety Executive (HSE) Chemicals Regulation Directorate

Other comments: Only available during office hours

SECTION 2 - HAZARDS IDENTIFICATION

Hazard pictograms:

2.1 Classification of the substance or mixture

H204: Fire or projection hazard

2.2 Label elements

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

Hazard category: Division 1.4

Signal word: Warning

Hazard statement: H204 Fire or projection hazard Precautionary Statements Prevention: P210, P234

Precautionary Statements Response: P370 + P372 + P380 + P373

Precautionary Statements Storage: P401 Precautionary Statements Disposal: P501

2.3 Other hazards

There are no chronic effects from handling the product appropriately.

When used in the correct manner, any fallout does not pose a risk to personal health.

SECTION 3 - COMPOSITION / INFORMATION ON INGREDIENTS

3.1 Substances

Name	CAS No.	EC No.
Ammonium Perchlorate	7798-98-9	232-235-1
Diphenylamine	122-39-4	204-539-4
Iron Oxide	1309-37-1	215-168-2
Nitrocellulose	9004-70-0	603-037-0
Nitroguanadine	556-88-7	209-143-5
Titanium Powder	7440-32-6	231-142-3
Barium Nitrate	10022-31-8	233-020-5
Copper Carbonate	1184-64-1	214-671-4
Sodium Nitrate	7631-99-4	231-554-3
Strontium Nitrate	10042-76-9	233-131-9

List above covers all products within the Flame family

SECTION 4 - FIRST AID MEASURES

4.1 Description of first aid measures

General notes: In the case of accident or sickness, seek medical advice immediately. **Following inhalation:** Remove casualty to fresh air and keep warm and at rest.

Following skin contact: Wash immediately with soap and water

Following eye contact: Immediately flush with water

Following ingestion: If accidently swallowed, rinse the mouth with plenty of water (only if the person is

conscious) and obtain medical attention

Self protection of the first aider: Pay attention to self protection!

4.2 Most important symptoms and effects, both acute and delayed

Irritation to the eyes and irritation to the skin

4.3 Indication of any immediate medical attention and special treatment needed

First aid, decontamination, treatment of symptoms

SECTION 5 - FIREFIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media: If there is a small flame persisting from the effect itself (or from the surrounding area) this can be extinguished with a dry powder or Carbon Dioxide Fire Extinguisher if trained to do so.

For larger fires do not attempt to extinguish any fire unless specifically trained to do so. Evacuate area and contact emergency services

Unsuitable extinguishing media: N/A

5.2 Special hazards arising from the substance or mixture

Hazardous combustion products may be produced.

Pyrotechnic devices can burn violently and the state of the fire will be dependent on composition, packaging and containment.

5.3 Advice for firefighters

Exercise extreme caution. Special protective equipment for firefighters: wear self-contained breathing apparatus and chemical protective clothing

SECTION 6 – ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

- 6.1.1 For non-emergency personnel: Suitable personal protective equipment. Remove ignition sources.
- **6.1.2 For emergency responders:** Remove persons to safety. Isolate hazard area and deny entry. Ventilate closed spaces before entering.

6.2 Environmental precautions

Prevent large spillages from entering surface water or drains.

6.3 Methods and material for containment and cleaning up

Dispose of as special waste in compliance with local and national regulations.

6.4 Reference to other sections

See sections 8 and 13

SECTION 7 - HANDLING AND STORAGE

7.1 Precautions for safe handling

Protective measures: Handle with caution.

Measures to prevent fire: No smoking and no naked flames.

Measures to prevent aerosol and dust generation: Do not tamper with the item.

Advice on general occupational hygiene: Do not eat, drink or smoke in work areas. Wash hands after

use.

7.2 Conditions for safe storage, including any incompatibilities

Technical measures and storage conditions: Store in cool, dry place.

Requirments for storage rooms and vessels: Always store in original packaging with appropriate marking and labelling. Stores should be adequately secured and identified.

7.3 Specific end use(s)

The identified use for this product is detailed in section 1.2.

SECTION 8 – EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Control parameters

Workplace exposure limits.

8.2 Exposure controls

- **8.2.1 Appropriate engineering controls:** Provide adequate ventilation.
- **8.2.2 Personal protection equipment:** No specific measures.
- **8.2.3 Environmental exposure controls:** No specific measures.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance: Solid tube containing loose composition

9.2 Other information

No additional information relevant to safe use.

SECTION 10 – STABILITY AND REACTIVITY

10.1 Reactivity

No specific data related to reactivity available.

10.2 Chemical stability

Stable under recommended conditions of storage and use.

10.3 Possibility of hazardous reactions

No hazardous reaction when handled and stored according to provisions.

10.4 Conditions to avoid

Avoid high temperatures, shock, static discharge, vibrations or other physical stresses that might result in a hazardous situation.

10.5 Incompatible materials

As this is a sealed unit incompatible materials are not applicable.

10.6 Hazardous decomposition products

Decomposition does not occur during normal circumstances of storage, transport and handling. Upon functioning various gases may be emitted including oxides.

SECTION 11 - TOXILOGICAL INFORMATION

11.1 Information on toxilogical effects

As this is a sealed unit this only applies to spillages.

May cause eye and skin irritation. Inhalation or ingestion may cause discomfort.

SECTION 12 - ECOLOGICAL INFORMATION

12.1 Toxicity

Not classified as dangerous for the environment/aquatic toxicant

12.2 Persistance and degradability N/A

12.3 Bioaccumulative potential N/A

12.4 Mobility in soil N/A

12.5 Results of PBT and vPvB assessment N/A

12.6 Other adverse effects N/A

SECTION 13 - DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

No specific regulations apply to packagings or spent devices.

Unused devices should be returned to the manufacturer, functioned in a safe manner or soaked in a vessel of water for 48 hours. If soaked in water review local and national requirements prior to disposal.

SECTION 14 – TRANSPORT INFORMATION

14.1 UN number

UN0431 or UN0432

14.2 UN proper shipping name

Articles pyrotechnic for technical purposes

14.3 Transport hazard class(es)

1.4G (UN0431) or 1.4S (UN0432)

14.4 Packing group

N/A

14.5 Environmental hazards

None

14.6 Special precautions for user

No smoking or naked flames

14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code

N/A

SECTION 15 - REGULATORY INFORMATION

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

Explosives Regulations 2014 and all orders of council, HSG 36, Local Authorities and the Health and Safety Executive.

Pyrotechnic Articles European Directive 2013/29/EU

15.2 Chemical Safety Assessment

N/A

SECTION 16 - OTHER INFORMATION

Information for this safety data sheet was obtained from sources considered technically accurate and reliable. Whilst every effort has been made to ensure full disclosure of product hazards, in some cases data is not available and is so stated. No warranty, expressed or implied, is made and supplier will not be liable for any losses, injuries or consequential damages which may result from the use of, or reliance on, any information contained in this form.