



27<sup>th</sup> June 2016

# SAFETY DATA SHEET

## SECTION 1 – PRODUCT IDENTIFICATION

### 1.1 Product identifier

**Product Name:** FLASHES, ROBOTICS & SPDS

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

**Relevant identified uses:** Articles pyrotechnic for technical purposes

### 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

### 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 pictograms:



Signal word: EXPLOSIVE

### 2.3 Other hazards

There are no chronic effects from handling the product appropriately

### SECTION 3 – COMPOSITION / INFORMATION ON INGREDIENTS

#### 3.1 Substances

Name	CAS No.	EC No.
Aluminium powder	7429-90-5	231-072-3
Ammonium Perchlorate	7798-98-9	232-235-1
Barium Nitrate	10022-31-8	233-020-5
Chlorinated Rubber	9006-03-5	918-668-5
Copper Carbonate	1184-64-1	214-671-4
Diphenylamine	122-39-4	204-539-4
Graphite	7782-42-5	231-955-3
Magnesium powder	7439-54-4	231-104-6
Nitrocellulose	9004-70-0	603-037-0
Potassium Nitrate	7757-79-1	231-818-8
Potassium Perchlorate	7778-47-7	231-912-9
Sodium Nitrate	7631-99-4	231-554-3
Strontium Nitrate	10042-76-9	233-131-9
Talc	14087-96-6	238-877-9
Titanium powder	7440-32-6	231-142-3

List above covers all products within the Flash, Robotic & SPD families

### 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 accidentally 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:** Do not attempt to extinguish any fire. 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.

**Requirements 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:** Appropriate Safety goggles.

**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 sealed tube

As this is a sealed unit chemical properties are not applicable

**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 – TOXICOLOGICAL INFORMATION**

**11.1 Information on toxicological 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 Persistence 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.