

**Safety data sheet**

Product name: **Jupiter K2 Handflare, Red**  
Doc. Code: **SDS Jupiter K2 Handflare, Red Edition 1.5**

**1. IDENTIFICATION OF THE SUBSTANCE /MIXTURE AND OF THE COMPANY / UNDERTAKING**

**1.1. Product identifier**

Product Name: *Jupiter K2 Handflare, Red*

Article Nos: *N/A*

Document code: *SDS Jupiter K2 Handflare, Red Edition 1.5*

**1.2. Relevant identical uses of the substance or mixture and uses advised against**

Use: *distress signal*

Uses advised against: *none specified*

**1.3. Details of the supplier of the Safety Data Sheet**

Company / manufacturer: *Pyrotechnourgiki Ltd – Marine Signals – Fireworks.*

Company address: *Eleonas Thivon, PC 32200, Thiva, Greece*

E-mail / internet: *info@pyrotech.gr www.pyrotech.gr*

Telephone number: *(+30) 2262071796*

Telefax number: *(+30) 2262071795*

**1.4. Emergency telephone number:**

Emergency telephone number: *(+30) 2262071796*

Contact person: *Ask for a company representative*

**2. HAZARDS IDENTIFICATION**

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

Main health hazard: *hazards refer to contents of flare.*

Inhalation: *May be mildly irritating to respiratory system.*

Skin contact: *May be mildly irritating to skin. Contact with flame or hot tube can cause severe burns.*

Eye contact: *Irritating to eyes.*

Ingestion: *Harmful if swallowed.*

Fire and explosion hazards: *Risk of explosion by shock, fire, friction, or other sources of ignition.*

Environmental hazards: *Not classified as hazardous to the environment.*

CLP Classification	DPD Classification
Explosive division 1.4 - H204 Acute toxic category 4 – H302 Eye Irritant Category 2 - H-319	Explosive - R2 Harmful - R22 – R36
For full wording of hazard statements see section 16	For full wording of hazard statements see section 16

**2.2. Label elements**



DANGER: Contains Strontium Nitrate

H203: Explosive; Fire, blast or projection hazard

H302: Harmful if swallowed

H319: Causes serious eye irritation

P102: Keep out of reach of children

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P210: Keep out of heat/ sparks/ open flames/ hot surfaces. No smoking  
P501: Dispose of contents / container to authorized waste disposal facility  
P370 + P378: In case of fire: Use water for extinction  
P309 + P311: If exposed or you feel unwell: call a POISON CENTER or a doctor/ physician  
P301 + P310: If swallowed: Immediately call a POISON CENTER or a doctor/ physician

### 2.3. Other hazards

May be mildly irritating to skin and respiratory system. Contact with exhaust flame or hot tube can cause severe burns

### 3. COMPOSITION / INFORMATION OF INGREDIENTS

Hazardous component(s)

Under CLP EC 1272/2008

Substance	CAS No	REACH registration No	%	Mass (g)	CLP Hazard Category and H statements
Strontium nitrate	10042-76-9	Not yet available	55% in illuminating mixture	30	Oxidizing solid Cat. 3 – H272 Acute toxic Cat. 4 – H302 Eye irritant Cat. 2, H319

Also contains magnesium powder stabilized with polymerized linseed oil.

Under DPD EC1999/45

Substance	CAS number	EC number	%	Mass (g)	Symbol and Risk phrases
Strontium nitrate	10042-76-9	233-131-9	55% in illuminating mixture	30	O, Xn: R8-22-36

### 4. FIRST – AID MEASURES

#### 4.1. Description of first-aid measures

*After inhalation:* Move patient to fresh air.

*After skin contact:* If burnt, wash with plenty of water, for at least 20 minutes

*After eye contact:* Keep eyelids apart. Wash with plenty of water. If needed, visit a physician.

*After ingestion:* Contact a physician

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

Contact with exhaust flame or burning flare can cause severe burns. Harmful if swallowed.

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

None other than above

### 5. FIRE-FIGHTING MEASURES

#### 5.1. Extinguishing media

- *Suitable extinguishing media:* Use any extinguishing media at early stages of fire. Once the product has ignited, it cannot be extinguished
- *Not to be used:* No restriction

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

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Product is explosive, evolving large quantities of gases and emitting large quantities of heat radiation if involved in fire.

5.3. **Advice for fire fighters:** Normal equipment

### 6. ACCIDENTAL RELEASE MEASURES

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

Personal precautions: Normal industrial hygiene. Use protective gloves

#### 6.2. Environmental Precautions

Do not let waste reach drains, sewers and bodies of water, or leak into ground

#### 6.3. Methods and material for containment and cleaning up

Collect using non sparking tools, reuse if undamaged. Otherwise, keep for disposal by experts.

#### 6.4. Reference to other solutions

See sections 8 and 13

### 7. HANDLING AND STORAGE

#### 7.1. Precautions for safe handling

Avoid dropping the signal on hard surfaces

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

Storage: Temperature should not exceed 75 ° C.

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

Distress signal

### 8. PERSONAL PROTECTION / EXPOSURE CONTROLS

#### 8.1. Control parameters:

Non set

#### 8.2. Exposure controls

*Recommended engineering controls:* No fire, sparks or welding close to the items. If cleaning up spillage, use tools which cannot strike sparks

*Personal protective equipment:* Normally not needed. But in case of spillage,

- Respiratory protection: In case of dust, use particle filter mask, as EN 143, type P, or EN 149, type FFP-S
- Eye protection: Shutter proof glasses or goggles
- Skin protection: Normal industrial hygiene.

*Specific hygiene measures:* No smoking

*Further information:* Always check applicability with your supplier of protective equipment.

### 9. PHYSICAL AND CHEMICAL PROPERTIES

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

*Appearance:* Silver metal tube with yellow plastic handle and red cap.

*Odor:* None

*Odor threshold value:* Not applicable

*pH (concentrated product):* Not applicable

*Melting point (° C):* not determined

*Boiling point/ range (° C):* not applicable

*Flash point (° C):* not applicable

*Evaporation rate:* not applicable

*Flammability:* Contents are flammable

*Explosive properties:* Intrinsically explosive.

*Vapor pressure (mbar at 25 ° C):* not applicable

*Vapor density:* not applicable

*Density at 20 ° C (g/cm<sup>3</sup>):* not determined

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*Solubility in water (% by weight):* Insoluble  
*Solubility in solvents:* not determined  
*Partition coefficient (log Pow):* Not applicable  
*Autoignition temperature (° C):* > 250  
*Decomposition temperature (° C):* not determined  
*Viscosity:* Not applicable  
*Oxidizing properties:* Contents have oxidizing properties.

### 9.2. Other information

*Note: These are typical values and do not constitute a specification.*

## 10. STABILITY AND REACTIVITY

### 10.1. Reactivity

Stable product under recommended handling and storage conditions.

### 10.2. Chemical stability

Stable product under recommended handling and storage conditions.

### 10.3. Possibility of hazardous reactions

Stable product under recommended handling and storage conditions.

### 10.4. Conditions to avoid

High temperatures, above 75° C

### 10.5. Incompatible materials

Not applicable

### 10.6. Hazardous decomposition products

Product is explosive, evolving large quantities of gases and emitting large quantities of heat radiation if involved in fire.

## 11. TOXICOLOGICAL INFORMATION

### 11.1. Information on toxicological effects

No data available on mixture. Data based on individual components shown below.

*Hazardous ingredients:* strontium nitrate.

- (a) Acute toxicity: strontium nitrate: LD<sub>50</sub> oral rat: 1892 mg / Kg, harmful by ingestion
- (b) Calculated product ATE ingestion = 3440 mg / Kg, not classified as hazardous by ingestion.
- (c) Skin corrosion / irritation: Sulfur: Skin irritant category 2, under CLP
- (d) Serious eye damage / irritation : Strontium nitrate: eye irritant category 2, under CLP
- (e) Respiratory or skin sensitization: No ingredients classified as sensitizers.
- (f) Germ cell mutagenicity: No deleterious effects known
- (g) Carcinogenicity: No deleterious effects known
- (h) Reproductive toxicity: No deleterious effects known
- (i) STOT – single exposure: No deleterious effects known
- (j) STOT – Repeated exposure: No deleterious effects known
- (k) Aspiration hazard: No deleterious effects known

*Likely routes of exposure:* Contact with skin

*Symptoms related to the physical, chemical and toxicological characteristics*

Powders can be irritating to the skin, eyes and respiratory tract. May cause gastric irritation, nausea and vomiting.

*Delayed and immediate effects, as well as chronic effects from short and long – term exposure:*

No deleterious effects known

*Other information:* None

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**12. ECOLOGICAL INFORMATION****12.1. Toxicity**

No toxic ingredients contained in the mixtures.

**12.2. Persistence and degradability**

Not applicable. Contains inorganic material and is in form of solid article

**12.3. Bio-accumulative potential**

*Mobility* No test data on product

**12.4. Mobility in soil** None – product in form of solid article**12.5. Results of PVB and vPvB assessment**

Does not fulfill the criteria for classification as PVB or vPvB

**12.6. Other adverse effects**

Not a marine pollutant (IMDG code)

**13. DISPOSAL CONSIDERATIONS****13.1. Waste treatment methods**

*Disposal of waste materials*

Waste should be kept in separate container. No smoking!

Destruction must only be done by experts. Used product may be disposed as ordinary plastic / metallic waste.

**DO NOT TRY TO DISMANTLE THE PRODUCT!**

*Contaminated packing:* May burn rapidly

**SECTION 14 TRANSPORT INFORMATION OF MSDS FOR Product: Hand Flare Red****14.1 ADR/RID**

UN No. : 0373

Proper shipping name: Signal devices, hand

Transport Class: 1.4S

Packing Group: II

Packing Instruction: P135

(Packaging details: Combination UN Approved packaging 4GV - Outer Fiberboard box UN Approved 4GV, Secondary inner package

(IP): PE Bag,

Label: 1.4

**14.2 IMO-IMDG code**

UN No. : 0373

Proper shipping name: Signal devices, hand

Transport Class: 1.4S

Packing Group: N/A

Packing Instruction: P135

(Packaging details: Combination UN Approved packaging 4GV - Outer Fiberboard box UN Approved 4GV, Secondary inner package

(IP): PE Bag

Label: 1.4

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**14.3 ICAO/IATA**

UN No. : 0373

Proper shipping name: Signal devices, hand

Transport Class: 1.4S

Packing Group: N/A

Packing Instruction: P135

(Packaging details: Combination UN Approved packaging 4GV - Outer Fiberboard box UN Approved 4GV, Secondary inner package (IP): PE Bag

Label: 1.4

**15. REGULATORY INFORMATION****a. Safety, health and environmental regulations / legislation specific for the substance or mixture**

None specified

**b. Chemical safety assessment**

A chemical safety assessment has not been carried out on this mixture

**16. OTHER INFORMATION**

*Inventories* All information listed in EINECS

*Sources of data used in this SDS:* In-house data files, Literature such as Sax's dangerous properties of industrial materials, the RSC Dictionary of substances and their effects, RTECS

CLP Annex VI, tables 3.1 and 3.2

Sources of key data used: Suppliers' safety data sheets, RTECS, EU ESIS web site

*R-phrases used in this document*

R2 Risk of explosion by shock, friction, fire, or other sources of ignition  
R22 Harmful if swallowed  
R36 Irritating to eyes

*H - statements used in this document*

H204 Fire or projection hazard  
H302 Harmful if swallowed  
H319 Causes serious eye irritation

Based on EU regulation 1907/2006 as amended by 453/2010.

The current safety data sheet was defined by Pyrotechnourgiki Ltd on the basis of knowledge of the product at the date of issue.

Therefore, data provided in this form cannot be considered as exhaustive.

It is the duty of the operator:

- To develop under his own responsibility, the safety dispositions regarding the operation of the product taking into account the data of this form.
- To pass to all users and operators the appropriate safety data and warning regarding the risks mentioned in the documentation relative to the utilization of this product.
- To be cautious of possible risks faced when the product is used for other uses than those for which it has been designed.