

SAFETY DATA SHEET

 Product: **RED FLARE PM6**

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

1.1. Product identifier

This SDS refers to a "pyrotechnical article", as identified by article 4, paragraph 8, and Annex I, point 2.1 from Reg. (EC) 1272/2008 CLP. A Safety Data Sheet is not required in accordance with reg. (EC) no. 1907/2006. However, the SDS template for substances and mixtures is used, as the mixture contained in the pyrotechnic article is to be considered dangerous according to the REACH and CLP regulations.

Commercial name:	RED FLARE PM6
Manufacturer code:	NFL000850

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

Hand flare emitting a bright red light. Visual distress signal for ships, lifeboats and liferafts under SOLAS/IMO regulations. USE ONLY FOR DISTRESS SIGNALLING AT SEA.

1.3. Details of the supplier of the safety data sheet

PANZERA S.r.l.
 Via Maso Renner 6
 39055 Laives (BZ) – ITALY
 e-mail: info@panzera.it

1.4. Emergency telephone number

For information, the manufacturer telephone is available during office hours (CET 08h00-17h00): +39 0119697308

Emergency Numbers: 112 (Europe) - 911 (Americas)

2. HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

Classification relates to the pyrotechnic article containing the mixture, classified and labeled according to Annex I, point 2.1 of Reg. (EC) 1272/2008 CLP

Expl. 1.4

Class: **1 – EXPLOSIVES**

Division: **1.4 – Substances and articles which present only a slight risk.**

2.2. Label elements

The applicable labelling elements are defined by Table 2.1.2 in CLP Regulation:

Classification:	Division 1.4 GHS and Reg. (EC) 1272/2008 CLP
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GHS pictogram:



Signal word:

Warning

2.2.1. Applicable Hazards and Precautionary Statements:

H204	Fire or projection hazard
P210	Keep away from heat/sparks/open flames/hot surfaces. — No smoking
P250	Do not subject to grinding/shock/friction

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P370+P380	In case of fire: Evacuate area
P372	Explosion risk in case of fire
P373	DO NOT fight fire when fire reaches explosives
P401	Store in a dry place and in compliance with national provisions on pyrotechnics
P501	Dispose of the product according to national provisions

2.2.2. Additional statements for people and environment:

Use only for distress signalling at sea
 DO NOT point or activate the product towards people or objects
 DO NOT use if damaged or expired

2.3. Other hazards

The pyrotechnical compound is a mixture of pressed powders inside the product. In case of break of the case and dispersion of the powders, these can show explosive behavior in the presence of ignition sources (sparks, shocks, heat).

3. COMPOSITION/INFORMATION ON INGREDIENTS
3.1. Substances

N/A

3.2. Mixtures

List of substances showing health or environmental hazards according to Directive 67/548/EEC and Regulation (EC) No. 1272/2008

Chemical features: Fuel and oxidant mixtures

NEC (Net Explosive Content)

for each item: 85 g

Substance	Formula	CAS-No.	EC-No.	Index-No.	Content (%) in the product	Classification Reg. (EC) n. 1272/2008 CLP *
Flare composition						
Strontium nitrate	Sr(NO ₃) ₂	10042-76-9	233-131-9	-	< 30	Ox. Sol. 3 – H272 Eye Dam. 1 – H318
Magnesium	Mg	7439-95-4	231-104-6	012-002-00-9	< 30	Flam. Sol. 1 – H228 Water-react. 2 – H261
Potassium Perchlorate	KClO ₄	7778-74-7	231-912-9	017-008-00-5	< 20	Ox. Sol. 1 – H271 Acute Tox. 4 – H302
Ignition / Delay composition						
Potassium nitrate	KNO ₃	7757-79-1	231-818-8	-	< 5	Ox. Sol. 2 - H272
Sulphur	S	7704-34-9	231-722-6	016-094-00-1	< 2	Skin Irrit. 2 – H315

* For the full text of the H-Statements mentioned in this Section, see Section 16.

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Reg. (EC) n. 1907/2006 REACH, Reg. (EC) n. 1272/2008 CLP and Commission Reg. (EU) n. 2020/878

4. FIRST AID MEASURES**4.1. Description of first aid measures**

It regards the mixture inside the product only. In case of:

Contact with skin: Wash with abundant water and soap.
Contact with eyes: Flush with water. If symptoms persist, seek medical advice.
Swallowing: Do not induce vomiting. Seek medical advice.
Inhalation: Seek and breathe fresh air. If symptoms persist, seek medical advice.

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

No data available

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

Immediately consult a doctor in case of ingestion of the mixture or in case of severe burns due to the activation of the product.

5. FIREFIGHTING MEASURES**5.1. Extinguishing media**

DO NOT TRY TO EXTINGUISH THE FIRE AND STAY AT SAFETY DISTANCE. For secondary fires use chemical extinguishers or sand. Do not use water.

5.2. Special hazards arising from the substance or mixture

The mixture, if directly exposed to fire, could show explosive behavior with the projection of fragments and smoke emission. Irregular combustion of the product can produce carbon monoxide and nitrogen oxides.

5.3. Advice for firefightersIf possible, safely isolate products not affected by the fire.
Protect the respiratory tract with gas or vapor filters masks.**6. ACCIDENTAL RELEASE MEASURES****6.1. Personal precautions, protective equipment and emergency procedures**

In case of breaking of the product, collect all the composition with a plastic broom. Waiting for disposal, keep away from ignition sources. Call police or firemen just in case of important quantity leaks.

6.2. Environmental precautions

Avoid composition leaks in water, ground or drainage system.

6.3. Methods and material for containment and cleaning up

Use protective gloves and goggles to collect and contain the mixture, avoiding contact with clothing, skin and eyes.

6.4. Reference to other sections

For damaged products, see Section 8 and Section 13.

7. HANDLING AND STORAGE**7.1. Precautions for safe handling**The operating instructions are printed on the label.
Protect from impact, friction, heat, fire, sparks, static electricity and other ignition sources.
Do not use or fire damaged products, they could show explosive behavior.

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Do not point (or light) the product towards people or objects.

7.2. Conditions for safe storage, including any incompatibilities

Store in a dry and ventilated place at a temperature between -10°C and 40°C.

Although the product is water-resistant, keep the boxes lifted from the ground, to avoid the absorption of moisture.

Keep away from potential sources of ignition and heat.

Store in accordance with national provisions concerning the storage of explosive and pyrotechnic material.

7.3. Specific end use(s)

USE ONLY FOR DISTRESS SIGNALLING AT SEA.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION**8.1. Control parameters**

No data available

8.2. Exposure controls

Normally no protection for the eyes, skin or respiratory system is required during the correct use of the product, as it is a product used in an emergency. However, it is important to follow the guidelines below:

Respiratory protection:	Do not inhale smokes or vapors released during combustion. If necessary, use a mask filters.
Hand and skin protection:	If the mixture is released from the product, handle only with rubber or PVC gloves and avoid contact with skin and clothing.
Eye protection:	Use safety goggles in case of exposure to the powders of the mixture inside the product.

9. PHYSICAL AND CHEMICAL PROPERTIES**9.1. Information on basic physical and chemical properties**

State:	The product is a pyrotechnic article. Pressed pyrotechnical powder inside an iron tube with a friction ignition mechanism.
Color:	The mixture has a grey color
Odour:	The mixture is generally odorless
Melting/Freezing Point:	N/A
Boiling point:	N/A
Flammability:	The pyrotechnic mixture is easily flammable and can exhibit explosive behavior if not ignited correctly
Lower and upper explosive limits:	N/A
Flash Point:	N/A
Auto Ignition Temperature:	N/A
Decomposition Temperature:	N/A
pH:	N/D
Kinematic viscosity:	N/A
Solubility:	The mixture is partially soluble in water
Partition coefficient n-octanol/water:	N/A
Vapor pressure:	N/A
Density:	N/A
Relative vapor density:	N/A
Particle characteristics:	The mixture has a particle size between 50 and 1000 µm

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Reg. (EC) n. 1907/2006 REACH, Reg. (EC) n. 1272/2008 CLP and Commission Reg. (EU) n. 2020/878

9.2. Other information**9.2.1. Information with regard to physical hazard classes****Proprietà esplosive della miscela pirotecnica**

Shock Sensitivity:	N/D
Effect of confined space heating:	N/D
Effect of ignition in a confined space:	N/D
Impact Sensitivity:	N/D
Sensitivity to rubbing:	N/D
Thermal Stability:	The mixture is stable between -30°C and +70°C
Packaging:	UN approved 4G cardboard boxes

10. STABILITY AND REACTIVITY**10.1. Reactivity**

The pyrotechnic mixture inside the product shows, by definition, flammable and explosive properties. Avoid all ignition sources.

10.2. Chemical stability

The mixture is chemically stable under normal handling and transport. Strong impact or friction could act as a primer for the mixture.

10.3. Possibility of hazardous reactions

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10.4. Conditions to avoid

Absolutely avoid impacts, friction, sparks, open flames and other sources of ignition. Avoid exposing the product to temperatures above 70°C.

10.5. Incompatible materials

Avoid contact of the mixture in the product with water.

10.6. Hazardous decomposition products

During the combustion reaction of the pyrotechnic composition, gases such as NO_x, CO, CO₂ could be released. However, when the product is used appropriately, no precautions need to be taken.

11. TOXICOLOGICAL INFORMATION**11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008**

The mixture inside the product can cause irritation to the skin, eyes and respiratory system if it is released from damaged products.

11.2. Information on other hazards

Not determined.

12. ECOLOGICAL INFORMATION**12.1. Toxicity**

N/D

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12.2. Persistence and degradability

The product as it is, without its packaging, can corrode and decompose slowly under atmospheric agents. The internal composition of the product is partially soluble.

12.3. Bioaccumulative potential

N/D

12.4. Mobility in soil

Avoid abandoning the product in any place, in water (rivers, lakes, sea) and in the sewer system. The product may slowly decompose and release microplastics, metal oxides and chlorine compounds that are absorbed by water and soil.

12.5. Results of PBT and vPvB assessment

N/D

12.6. Endocrine disrupting properties

N/D

12.7. Other adverse effects

The combustion gases of the pyrotechnic article can contribute to the greenhouse effect and to air pollution if released in large quantities.

13. DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Treat expired or damaged products carefully and contact the dealer, manufacturer or authorities directly for detailed information on the disposal of pyrotechnic products.

Disposal must be carried out in accordance with national laws on the environment, waste and the storage/manufacturing of pyrotechnic products.

The exhausted products, once ignited and used, can be disposed of in solid waste, making sure that there is no unburned pyrotechnic mixture.

Recyclability:

Uncontaminated packaging can be separated and recycled.

14. TRANSPORT INFORMATION

14.1. UN number or ID number

UN 0191

14.2. UN proper shipping name

ADR/IMDG/ICAO-IATA:

UN 0191	SIGNAL DEVICES, HAND	1.4 G
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14.3. Transport hazard class(es)

1.4 G

14.4. Packing group

PGII

14.5. Environmental hazards

N/D

14.6. Special precautions for user

N/D

Packaging labelling:



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14.7. Maritime transport in bulk according to IMO instruments

N/A

15. REGULATORY INFORMATION**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture**

The product is pyrotechnic article for distress signalling. It conforms with SOLAS / IMO regulations.
It is recommended to comply with all national and international regulations concerning the transport, use and disposal of pyrotechnic products.

15.2. Chemical safety assessment

N/D

16. OTHER INFORMATION

With reference to Section 3 of this Safety Data Sheet, the H-statements of the components of the mixture(s) in the product are reported here:

H-statements

H228	Flammable solid
H261	In contact with water releases flammable gases
H271	May cause fire or explosion; strong oxidizer
H272	May intensify fire; oxidizer
H302	May be harmful if swallowed
H315	Causes skin irritation
H318	Causes serious eye damage

The information contained in this Safety Data Sheet refers to the indicated product and may not be valid if it is used in combination with other products.

The information is based on current knowledge of the product and its components.

The manufacturer is not responsible for any improper use or use other than those expressly indicated in the instructions for use.