



Div: EVANinc



RED ROCKET PM4  
Safety Data Sheet  
Date of Issue : 24/07/2017  
Version : 1.0

SECTION 1 : identification of the product and of the company

1.1. Product identifier

Product name : RED ROCKET PM4  
Synonyms : N/A  
Product code : 52162 / 52262 / 800 / 805 / 4250

1.2. Relevant identified uses of the product and uses advised against

Use of the product : Rocket parachute red flare. Visual signal for ships, lifeboats and liferafts.  
Use advised against : n/a

1.3. Details of the supplier/importer of the product

Supplier :	Orion Safety Products	Importer / Assembler	CIL/Explosives
	28320 St. Michaels Rd		533 Argenteuil
	Easton, MD		Lachute, QC
	21601		J8H 3Y2
	Tel : 800-637-7807		Tel : 450-566-0655
	Fax : 410-822-7759		Fax : 450-566-0677
	email:customerservice@orionsignals.com		email:reception@cilexplosives.com
	www.orionsignals.com		www.cilexplosives.com

1.4. Emergency telephone number

Emergency number : Canutec : 1-613-996-6666

SECTION 2 : Hazards identification

2.1. Classification of the product

Explosives Category 1.4 H203



Hazard pictograms :

Signal word :

Hazard statements :

Precautionary statements :

Danger

H203

Explosive: fire, blast or projection hazard

P210

Keep away from heat/sparks/open flames/hot

P250

Do not subject to grinding/shock/friction

P280

Wear protective gloves/protective clothing/eye protection/face protection

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 not over 65 degrees Celsius

P501

Dispose of contents/container as hazardous waste

Other hazards not contributing to the classification :

Burn hazard if not used conforming to the product instruction  
 Do not use damaged products  
 Keep out the reach of children  
 Do not point (and fire) product at people or properties  
 Do not ignite in confined spaces. Product is designed for outdoor use only.

### SECTION 3 : Composition/information on ingredients

Chemical Characteristics: Oxidizer and fuel mixture  
 Description: Pressed pyrotechnical powder  
 Active mass: 135 gr  
 Product total weight: 370 gr

Component	CAS #	EINCS #	%AGE
Lighter Composition			
Strontium nitrate	10042-76-9	233-131-9	10%
Magnesium	7439-95-4	231-104-6	8%
PVC - Solvin	9002-86-2	236-948-9	2.5%
Potassium Perchlorate	7778-74-7	231-912-9	2.5%
Linseed oil	8001-26-1	232-278-6	0.2%

Component	CAS #	EINCS #	%AGE
Motor Composition			
Potassium Perchlorate	7778-74-7	231-612-9	7%
Phenol formaldehyde resin	9003-35-4	500-005-2	4%
Phenol	108-95-2	203-632-7	residuals

Note : Due to Confidential Business Information i.e "Trade Secrets", the exact percentage of each ingredient has not been disclosed. CBI information will be shared with appropriate authorities if circumstances warrant.

#### SECTION 4 : First aid measures

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

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

First-aid measures after inhalation :	If the injured inhales combustion gases, bring him to open air and eventually a physician
First-aid measures after skin contact :	Flush with water
First-aid measures after eye contact :	Wash immediately with abundant water and consult a physician
First-aid measures after ingestion :	Cause vomiting with warm salt water. If the injured is seriously harmed seek medical help.

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

Symptoms and effect : See section 2 labeling and section 11

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

Not defined

#### SECTION 5 : Firefighting measures

##### 5.1. Extinguishing media

Suitable extinguishing media :	DO NOT TRY TO EXTINGUISH THE FIRE AND STAY AT SAFE DISTANCE. For secondary fires use chemical extinguisher or sand.
Unsuitable extinguishing media :	Do not use water.

##### 5.2. Special hazards arising from the chemical

Fire hazard :	Do not keep the product at temperature over 65 degrees Celsius. Bring product out of flames.
Explosion hazard :	High emission of fumes and light. Protect respiratory organs. if fire burns many products, protect eyes from ultraviolet emissions.
Reactivity :	N/A

5.3. Advice for firefighters

Firefighting instructions : DO NOT TRY TO EXTINGUISH THE FIRE AND STAY SAFETY DISTANCE.

Protection during firefighting : High emission of fumes and light. Protect respiratory organs. If the fire burns many products, protect the eyes from ultraviolet emissions.

SECTION 6 : Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Protective equipment : N/A

Emergency procedures : N/A

6.2. Environmental precautions

N/A

6.3. Methods and material for containment and cleaning up

For containment : N/A

Methods for cleaning up : In case of breaking of the packaging and discharge of mixture, broom, pick it by dustpan (if possible plastic) and put the material in a plastic container. Keep out of flames & sparks. Call immediately police or firemen in case of large spillage.

SECTION 7 : Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Operating instructions are printed on the tube (product)  
Protect from exposure to impacts, friction, heat, fire, spark, electrostatic charges and other ignition sources.  
Do not use damaged products  
Do not use in close places, outdoor use only.  
Do not point (and fire) the product at people or properties.

Hygiene measures : Wash thoroughly after handling

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store in a dry and airy place at temperature between - 30 degrees Celsius and 65 degrees Celsius.

Incompatible products : Store with goods of the same danger class.

Incompatible materials : Store only with non-dangerous materials

Storage temperature : Between - 30 degrees Celsius and 65 degrees Celsius

Heat and ignition sources : Keep away from ignition and heat sources.

Prohibitions on mixed storage : N/A

Storage area :	Store in a dry and airy place at temperature between - 30 degrees Celsius and 65 degrees Celsius. Store according to the local regulations regarding the storage of explosive materials.
Special rules on packaging :	Keep the package off the ground to avoid moisture absorption.
Packaging materials :	Cardboard box

## SECTION 8 : Exposure controls/personal protection

### 8.1. Control parameters

None set

### 8.2. Exposure controls

If substances come out from a damage or defective product use the precautions reported below.

Appropriate engineering controls :	No heat sources or ignition
Hand Protection :	Handle the material accidentally leaked wearing rubber or PVC gloves.
Eye protection :	Use protective glasses
Skin and body protection :	Avoid contact with skin and garments
Respiratory protection :	Do not inhale fumes or vapors sent forth in working. Use a mask with acid filters.
Other information :	Always check applicability with you supplier of protective equipment.

## SECTION 9 : Physical and chemical properties

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

Physical state :	N/A
Appearance :	External: yellow plastic tube with superior cap (yellow) and inferior screw cap (red). Internal: motor activated by a firing pin, illuminating flare (gray pyrotechnical composition pressed in a cardboard tube) bound to a nylon parachute.
Molecular mass :	Not applicable
Colour :	Not applicable
Odour :	None
Odour threshold :	None
PH :	Not applicable
Relative evaporation rate :	Not applicable
Melting point :	Not applicable
Freezing point :	Not applicable
Boiling point :	Not applicable

Flash point :	Not applicable
Critical temperature :	***ENTER TEMPERATURE HERE***
Self ignition temperature :	No data available
Decomposition temperature :	Not applicable
Flammability :	Not applicable
Vapour pressure :	Not applicable
Critical pressure :	Not applicable
Relative density :	Not applicable
Density :	No data available
Solubility :	Composition partially soluble (20 degrees Celsius in g/l)
Log Pow :	Not applicable
Log Kow :	Not applicable
Viscosity :	Not applicable
Explosive properties :	Not applicable
Oxidizing properties :	Not applicable
Explosive limits :	No data available
Auto ignition temperature :	Not applicable

## SECTION 10 : Stability and reactivity

### 10.1 Reactivity

When the product is used in the appropriate manner no danger exists and it is not necessary to take precautions.

### 10.2. Chemical stability

When the product is used in the appropriate manner no danger exists and it is not necessary to take precautions.

### 10.3. Possibility of hazardous reactions

When the product is used in the appropriate manner no danger exists and it is not necessary to take precautions.

### 10.4. Conditions to avoid

Temperature < - 30 degrees Celsius  
 Temperature > 65 degrees Celsius  
 Strong mechanical impacts and frictions  
 Near potential sparks sources.

### 10.5. Incompatible materials

Avoid contact of the composition with organic materials and other fuels.

### 10.6. Hazardous decomposition products

During the reaction of the pyrotechnical components dangerous gases and particles are produced: NOX, CO, CO2, metal oxides and acid vapors.

## SECTION 11 : Toxicological information

### 11.1. Information on toxicological effects

Ingredient	Oral LD50	Skin LD50	LC50
No Ingredient mentioned	N/A	N/A	N/A

Acute toxicity :	Breathing in the combustion gases (air limit 6 mg/m <sup>3</sup> )
Skin corrosion/irritation :	After long exposure it may cause skin irritation
Serious eye damage/irritation :	No deleterious effects known
Respiratory or skin sensitisation :	After long exposure it may cause mucosa irritation
Germ cell mutagenicity :	No deleterious effects known
Carcinogenicity :	No deleterious effects known
Reproductive toxicity :	No deleterious effects known
Specific target organ toxicity (single exposure) :	No deleterious effects known
Specific target organ toxicity (repeated exposure) :	No deleterious effects known
Aspiration hazard :	No deleterious effects known
Potential adverse human health effect and symptoms :	No deleterious effects known
Symptoms/injuries after inhalation :	No deleterious effects known
Symptoms/injuries after skin contact :	No deleterious effects known
Symptoms/injuries after eye contact :	No deleterious effects known
Symptoms/injuries after ingestion :	No deleterious effects known
Symptoms/injuries after intravenous administration :	No deleterious effects known
Chronic symptoms :	No deleterious effects known

## SECTION 12 : Ecological information

### 12.1. Toxicity

Aquatic Toxicity : Not defined

### 12.2. Persistence and degradability

The torch itself, without its package, may slowly decompose under the effect of atmospheric agents and release oxides and nitrates. The composition inside the product is partially water soluble.

### 12.3. Bioaccumulative potential

Not defined

### 12.4. Mobility in environmental media

Avoid the product release in water (rivers, lakes, sea). It may slowly decompose and release metal oxides, nitrates and chlorine compounds easily absorbed by water and soil.

12.5. Other adverse effects

The combustion gases may contribute to the greenhouse effect if release in very high quantities.

SECTION 13 : Disposal considerations

13.1.. Disposal methods

Disposal should be carried out in accordance with health, safety, waste, environmental, storage/manufacture of explosives regulations.

Recyclability: Non-contaminated packages may be recycled

Expired products: Depending on local regulations, not conforming, damaged or expired products could be destroyed by combustion by specialized authorities with appropriate appropriate tools in an appropriate area.

SECTION 14 : Transport information

14.1.. UN number

UN number : 0403

14.2.. UN proper shipping name

UN proper shipping name : Flares, aerial

UN hazard class : 1.4G



UN DG Placard :

Packing group : II - Medium Danger

SECTION 15 : Regulatory information

Safety, health and environmental regulations /

Legislation specific for the substance or mixture: None specified

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

Other regulations: For handling, use, storage, transportation and disposal of this product follow the local, national and international rules and the regulations in forces.



## SECTION 16 : Other information

Revision information : 24/07/2017

Referring to Section 3 of this Safety Data Sheet, R-phrases and H-statements for the inner composition components are clarified below:

### R-Phrases

R8	Contact with combustible material may cause fire
R9	Explosive when mixed with combustible material
R11	Highly flammable
R15	Contact with water liberates extremely flammable gases
R22	Harmful if swallowed
R34	Causes severe burns
R43	May cause sensitisation by skin contact
R68	Possible risk of irreversible effects
R20/22	Harmful by inhalation and if swallowed
R20/21/22	Harmful by inhalation, in contact with skin and if swallowed
R23/24/25	Toxic by inhalation, in contact with skin and if swallowed
R36/37/38	Irritating to eyes, respiratory system and skin
R48/20/21/22	Harmful: danger of serious damage to health by prolonged exposure through inhalation, in contact with skin and if swallowed.

### H-Statements

H201	Explosive; mass explosion hazard
H228	Flammable solid
H251	Self-heating: match catch fire
H261	In contact with water releases flammable gas
H271	May cause fire or explosion: strong oxidizer
H272	May intensify fire; oxidizer
H302/H312/H332	May be harmful if swallowed, in contact with skin and if inhaled
H301	Toxic if swallowed
H302	May be harmful if swallowed
H311	Toxic in contact with skin
H314	Causes severe skin burns and eye damage
H315	Causes skin irritation
H317	May Cause an allergic skin reaction
H319	Causes serious eye irritation
H331	Toxic if inhaled
H335	May cause respiratory irritation
H341	Suspected of causing genetic defects
H373	May cause damage to organs through prolonged or repeated exposure

SECTION 16 : Other information (Continued)

The information reported in this Safety Data Sheet describes safety requirements that may not be valid if the product is used in combination with other products. The information is based on today knowledge of the product and its components. The company is not responsible for improper or incorrect use, different from what indicated on instruction.