

Based on Regulation (EC) No. 1907/2006 as amended

SDS PyroPol Handflare Red CF4 Issued: December 2018\_Rev.00

### **SECTION 1: PRODUCT AND COMPANY INFORMATION**

**Product Name:** 

Handflare Red CF4, Art.-No.: 1393500

CIL/ORION Handflare Red CF4, Art.-No.: 1393510

Area of Usage:

Marine distress signal

Manufacturer:

Company name: PyroPol GmbH

Company address: Lippenhorstweg 29, 21514 Hornbek, Germany

E-Mail / Internet: info@pyropol.de / www.pyropl.de
Telephone No.: +49 - (0) 4158 - 89 00 73
Telefax No.: +49 - (0) 4158 - 89 00 97

**24 h Emergency Contact No.:** +49 - (0) 171 - 126 15 95

### **SECTION 2: HAZARDS IDENTIFICATION**

Main health hazard: Hazards refer to contents of flare

Inhalation:May be mildly irritating to respiratory systemSkin 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	Explosive	– R2		
Acute toxic category 4	– H302	Harmful	– R22/36		
Eye irritant category 2	– H319				

For full wording of hazard statements see Section 16

Label:

Danger Symbol:



Key Word: Warning

WARNING: Contains Strontium Nitrate

**Danger Advice Documents:** 

H204 Fire or projection hazard
H302 Harmful if swallowed
H319 Causes serious eye irritation
P102 Keep out of reach of children

P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking.
P301 + P310 If swallowed: Immediately call a POISON CENTER or doctor/ physician
P309 + P311 If exposed or you feel unwell: call a POISON CENTER or a doctor/ physician

P370 + P380 During Fire, evacuate immediate area

P374 Fire fighting under normal precautions from a reasonable distance
P501 Dispose of contents / container to authorized waste disposal facility

**Other hazards:** May be mildly irritating to skin and respiratory system.

Contact with flame or hot tube can cause severe burns.



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### **SECTION 3: COMPONENT INFORMATION**

Hazardous component(s):

Under CLP EC1272/2008

Substance	CAS No	REACH	%	Mass	CLP Hazard Category and
		registration No		(g)	H statements
Strontium nitrate	10042-76-9	01-1210007501-75	55% in	30	Oxidizing solid Cat. 3 – H272
			illuminating		Acute toxic Cat. 4 – H302
			mixture		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

**SECTION 4: FIRST AID MEASURES** 

General Advice: Not defined

After Inhalation (Combustion Gases): Having problems after inhaling move patient to fresh air, consult a physician

After Skin Contact: Wash with plenty of water, consult a physician After Contact with Eyes: Wash with lots of water, contact a physician

After Swallowing: Not possible to swallow product

**Advice for doctors** 

Symptoms: Not defined Dangers: Not defined Actions to be taken: Not defined

#### **SECTION 5: FIRE FIGHTING MEASURES**

**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

Special hazards arising from the

substance or mixture:

Product is explosive, evolving large quantities of gases and emitting large

quantities of heat radiation if involved in fire

Advice for fire fighters: The usual protective gear in case of fire

### **SECTION 6: ACCIDENTIAL RELEASE MEASURES**

Personal precautions, protective equipment

and emergency procedures

Personal precautions: Normal industrial hygiene. Use protective gloves.

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

**Methods and material for**Collect using non sparking tools, reuse if undamaged.

**containment and cleaning up:** Otherwise, keep for disposal by experts.

**Reference to other sections:** See Sections 8 and 13



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### **SECTION 7: HANDLING AND STORAGE**

Handling

Advice on Safe Handling: Conforming instructions printed on the signal.

Protect from exposure to impacts, friction, heat, fire, sparks,

electrostatic charges and other ignition sources. Avoid dropping the signal on hard surfaces.

Do not use damaged product.

Conditions for safe storage, including any incompatibilities

Storage: Temperature should not exceed 65°C

Specific end use(s): Marine distress signal

Storage

Requirements of Storage Facility Store in a cool and dry place.

and Container: Store only in the original packaging and according to the local

regulations regarding the storage of explosive materials.

#### **SECTION 8: PERSONAL PROTECTION/EXPOSURE CONTROLS**

Control parameters: None set

**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 such as EN143 Type P or

EN149 Type FFP-S

Hand protection:

Eye protection:

Shatter 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

### **SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**

### Information on basic physical and chemical properties

Appearance: Silver metal tube with yellow handle and red cap

Odor: None

Odor threshold value:
pH (concentrated product):
Melting point (°C):
Boiling point/ range (°C):
Flash point (°C):
Evaporation rate:

Not applicable
Not applicable
Not applicable

Flammability:

Explosive properties:

Vapor pressure (mbar at 25°C):

Vapor density:

Contents are flammable
Intrinsically explosive

Not applicable

Not applicable

Density at 20°C (g/cm³):

Solubility in water (% by weight):

Solubility in solvents:

Partition coefficient (log Pow):

Autoignition temperature (°C):

Not determined
Not determined
Not determined
> 250

Decomposition temperature (°C):

Viscosity:

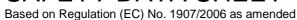
Not determined

Not applicable

Oxidizing properties: Contents have oxidizing properties

Other information

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



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### **SECTION 10: STABILITY AND REACTIVITY**

Reactivity: Stable product under recommended handling and storage conditions
Chemical stability: Stable product under recommended handling and storage conditions
Possibility of hazardous reactions: Stable product under recommended handling and storage conditions

Conditions to avoid: High temperatures, above 100°C

Incompatible materials: Not applicable

Hazardous decomposition products: Product is explosive, evolving large quantities of gases and emitting large

quantities of heat radiation if involved in fire

### **SECTION 11: TOXICOLOGICAL INFORMATION**

Information on toxicological effects

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

Hazardous ingredients: Strontium nitrate Acute toxicity: Strontium nitrate:

 $LD_{50}$  oral rat 1892 mg/kg, harmful by ingestion Calculated product ATE ingestion = 3440 mg/kg,

not classified as hazardous by ingestion

Skin corrosion / irritation:

No classifiable effects known

Serious eye damage / irritation: Strontium nitrate: Eye irritant category 2 under CLP

Respiratory or skin sensitisation: No ingredients classified as sensitisers

Germ cell mutagenicity:

Carcinogenicity:

Reproductive toxicity:

STOT-single exposure:

STOT-repeated exposure:

Aspiration hazard:

No deleterious effects known No deleterious effects known

Likely routes of exposure: Contact with skin

Symptoms related to the physical, Powders may be mildly irritating to the skin, eyes and respiratory tract.

chemical and toxicological characteristics: 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

### **SECTION 12: ECOLOGICAL INFORMATION**

**Toxicity:** No toxic ingredients contained in the mixtures

Persistence and degradability: Not applicable. Contains inorganic materials and is in form of solid article.

**Bioaccumulative potential** 

Mobility: No test data on product

**Mobility in soil:** None. Product in form of solid article.

Results of PBT and vPvB assessment: Does not fulfill the criteria for classification as PBT or vPvB

Other adverse effects: Not a marine pollutant (IMDG code)

### **SECTION 13: DISPOSAL**

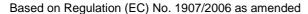
Waste treatment methods

Disposal of waste materials: Disposal should be carried out in accordance with local health

and safety, waste, environmental and storage / manufacture of

explosives regulations.

DO NOT TRY TO DISMANTLE THE PRODUCT!



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### **SECTION 14: TRANSPORT INFORMATION**

Land transport (ADR/RID, GGVSEB)

UN No.: 0373

Proper Shipping Name: SIGNAL DEVICES, HAND

Transport Class / Label: 1.4S
Packing Instruction: P135

Sea Transport (IMO-IMDG Code, GGVSee)

UN No.: 0373

Proper Shipping Name: SIGNAL DEVICES, HAND

Transport Class / Label: 1.4S
Packing Instruction: P135
EMS Code: F - B, S - X

Comment: Not classified as Marine Pollutants

Air Transport (ICAO/IATA DGR)

UN No.: 0373

Proper Shipping Name: Signal devices, hand

Transport Class / Label: 1.4S
Packing Instruction: P135

Additional information: Passenger and Cargo Aircraft

EX Number (DOT/USA): N/A



Explosive substances and explosive articles
Subclass 1.4

### **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: Work Protection Law, Health Protection Law,

Explosives Regulations and Explosive Law must be

conformed to. The item is not subject to safety evaluations.

### **SECTION 16: OTHER INFORMATION**

R-phrases used in this document

R2 Risk of explosion by shock, friction, fire, or other sources of ignition

R8 Contact with combustible material may cause fire

R22 Harmful if swallowed R36 Irritating to eyes

H-statements used in this document

H204 Fire or projection hazard
H272 May intensify fire, oxidizer
H302 Harmful if swallowed
H319 Causes serious eye irritation

Abbreviations and Acronyms:

GHS Globally Harmonized System of Classification and Labelling of Chemicals

CAS-No. Registration Number of the Chemical Abstract Service

EG-No. Registration Number of the <u>European Inventory of Existing Chemical Substances</u> (EINECS)

EG-Index-No. ID Code for a particular dangerous material

AGW-value Work Place Safety/Limit Value

BGW-value Biological Work Place Safety/Limit Value CMR-Substance Cancergen, Mutanogen, Fertility Damaging



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The information in the safety data sheet is based on our present knowledge. It is intended to describe our products with regard to safety requirements and is not intended to guarantee any particular properties.

This is a voluntary product information.

There is no legal obligation to issue a safety data sheet according to Regulation (EC) No 1907/2006 as amended.