

1. Identification of the substance / mixture and of the company / undertaking

Product Identifier

Floating orange smoke signal 3 minute, KEL

Relevant identified uses

Use according to manufacturer's directions. Sea distress signal. Sea distress signal providing effective position marking during rescue operations and can be used to indicate wind direction, producing dense orange smoke for a minimum of 3 minutes.

Details of the supplier of the safety data sheet

Wescom Signal and Rescue Spain S.L.

Camino Mendi S/N

31191 Esquiroz de Galar (Navarra)

Telephone: 0034948312068

E-Mail: info@signalandsafety.com

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2. Hazards Identification

Classification according to regulation (EC) n° 1272/2008 (CLP):
 Explosive 1.4 Division



CLP label elements
 Signal Word

Warning

Hazard statement(s):

H204 Fire or projection hazard.

Precautionary statement (s) Prevention

P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking.

P240 Do not subject to grinding/shock/sources of friction.

P250 Do not subject to grinding/shock/sources of 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.

P374 Fight fire with normal precautions from a reasonable distance

P401 DO NOT fight fire when fire reaches explosives.

P501 Dispose of contents/container in accordance with local regulations

Reach-art 57-59. The mixture does not contain Substances of Very High Concern (SVHC) at the SDS print date.

3. Composition / Information on Ingredients

Chemical characteristics: Oxidants and flame mixtures

Description: Pressed pyrotechnic mixture.

Name	CAS N° EC N° Index N° Reach N°	% (weight)	Classification according to regulation (EC) No 1272/2008 [CLP]
Potassium chlorate	3811-04-9 223-2879-7 017-004-00-3 01-2119494917-18-xxxx	<40grams	Oxidizing Solid Category 1, Acute Toxicity (Inhalation) Category 4, Acute Toxicity (Oral) Category 4, Chronic Aquatic Hazard Category 2; H271, H332, H302, H411 [3]

Potassium nitrate	7757- 79-1 231-818-8 NOT available 01-2119494917-18-xxxx	<20 grams	Oxidizing Solid Category 3, Acute Toxicity (Oral) Category 4, Eye Irritation Category 2; H272, H302, H319 [1]
Antimony Trisulphide	1345-04-6 215-713-4 Not available Not available	<1 grams	Aquatic Chronic Hazard (Category 2) Acute Toxicity (Inhalation) Category 4 Acute Toxicity (Oral) Category 4 H332, H302, H411 [3]

4. First Aid Measures:

In the unlikely event of receiving burns from this product, seek medical attention at once. Exposure to smoke may cause irritation to eyes and throat. Move patient to fresh air. Other measures to be taken as follows:

- Inhalation: Remove from further exposure. If symptoms develop such as coughing, wheezing or shortness of breath seek medical attention.
- Skin contact: Remove contaminated clothing. Wash exposed areas with soap and water. Do not use solvents or thinners of any kind.
- Eyes contact: Flush with water for at least 10 minutes. If symptoms persist, seek medical advice.
- Ingestion: Make patient drink water. Do not induce vomiting. Seek medical attention at once.

5. FIREFIGHTING MEASURES

- Extinguishing media: DANGER: Deliver media remotely.
For minor fires: Flooding quantities only.
For large fires: Do not attempt to extinguish.
Apply by mechanical means only.
- Fire Incompatibility: Avoid contact with other chemicals
- Fire Fighting: WARNING: EXPLOSIVE MATERIALS / ARTICLES PRESENT! Evacuate all personnel and move upwind. Prevent re-entry. Alert Fire Brigade and tell them location and nature of hazard. May detonate and burning material may be propelled from fire. Wear full-body protective clothing with breathing apparatus. Prevent, by any means available, spillage and fire effluent from entering drains and watercourses. Fight fire from safe distances and from protected locations. Use flooding quantities of water. DO NOT approach containers or packages suspected to be hot. Cool any exposed containers not involved in fire from a protected location. Equipment should be thoroughly decontaminated after use. Slight hazard when exposed to heat, flame and oxidisers.
- Fire/Explosion Hazard: Division 1.4 Substances, mixtures and articles which present no significant hazard: substances, mixtures and articles which present only a small hazard in the event of ignition or initiation. The effects are largely confined to the package and no projection of fragments of appreciable size or range is to be expected. An external fire shall not cause virtually instantaneous explosion of almost the entire contents of the package.

6. Accidental Release Measures:

- Personal precautions, protective equipment and emergency procedures See section 8
- Environmental precautions See section 12
- Methods and material for containment and cleaning up:

Minor Spills	WARNING! EXPLOSIVE. BLAST and/or PROJECTION and/or FIRE HAZARD Clean up all spills immediately. Avoid inhalation of the material and avoid contact with eyes and skin. Wear impervious gloves and safety glasses. Remove all ignition sources. Use spark-free tools when handling. Sweep into non-sparking containers or barrels and moisten with water. Place spilled material in clean, sealable, labelled container for disposal. Flush area with large amounts of water
Major Spills	WARNING! EXPLOSIVE. Clear area of personnel and move upwind. Alert Fire Brigade and tell them location and nature of hazard. May be violently or explosively reactive. Wear full body protective clothing with breathing apparatus. Consider evacuation (or protect in place). In case of transport

	accident notify Police, Emergency Authority, Competent Explosives Authority or Manufacturer. No smoking, naked lights, heat or ignition sources. Increase ventilation. Use extreme caution to prevent physical shock. Use only spark-free shovels and explosion-proof equipment. Collect recoverable material and segregate from spilled material. Wash spill area with large quantities of water
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7. Handling And Storage:

Safe handling Handle gently. Use good occupational work practice.
 Observe manufacturer's storage and handling recommendations contained within this SDS.
 Avoid all personal contact, including inhalation.
 Avoid smoking, naked lights, heat or ignition sources.
 Explosives must not be struck with metal implements.
 Avoid mechanical and thermal shock and friction.
 Use in a well ventilated area.
 Avoid contact with incompatible materials.
 When handling DO NOT eat, drink or smoke.
 Avoid physical damage to containers.
 Always wash hands with soap and water after handling.
 Work clothes should be laundered separately.

Fire and explosion

Protection See section 5

Other information: Store cases in a well-ventilated magazine licensed for the appropriate Class, Division and Compatibility Group.
 Rotate stock to prevent ageing. Use on FIFO (first in-first out) basis.
 Observe manufacturer's storage and handling recommendations contained within this SDS.
 Store in a cool place in original containers.
 Keep containers securely sealed.
 No smoking, naked lights, heat or ignition sources.
 Store in an isolated area away from other materials.
 Keep storage area free of debris, waste and combustibles.
 Protect containers against physical damage.
 Check regularly for spills and leaks
 NOTE: If explosives need to be destroyed, contact the Competent Authority.
 Store away from incompatible materials.
 Keep out of reach of children

Conditions for safe storage, All packaging for Class 1 Goods shall be in accordance with the requirements of the relevant Code for the transport of Dangerous Goods.

Class 1 is unique in that the type of packaging used frequently has a very decisive effect on the hazard and therefore on the assignment to a particular division

Storage incompatibility: Avoid contact with other explosives, pyrotechnics, solvents, adhesives, paints, cleaners and unauthorized metals, plastics, packing equipment and materials. Avoid contamination with acids, alkalis, reducing agents, amines and phosphorus. Explosion hazard may follow contact with incompatible materials

Specific end use(s): See section 1.2

8. Exposure Controls / Personal Protection

DERIVED NO EFFECT LEVEL (DNEL)

Not Available

PREDICTED NO EFFECT LEVEL (PNEC)

Not Available

OCCUPATIONAL EXPOSURE LIMITS (OEL)

INGREDIENT DATA

Source	Ingredient	CAS N°	TWA	STEL
Spain Workplace Exposure Limits 2015	Antimony Trisulphide	1345-04-6	0,5 mg/m ³	Not available

EMERGENCY LIMITS

Ingredient	TEEL-1	TEEL-2	Original IDLH	Revised IDLH
Potassium chlorate	2.3 mg/m ³	25 mg/m ³	Not available	Not available
potassium nitrate	0.074 mg/m ³	0.82 mg/m ³	Not available	Not available
Antimony Trisulphide	2.8 mg/m ³	31mg/m ³	Not available	Not available

Hands protection: No necessary

Eyes protection: No necessary

Body protection: No necessary

9. Physical And Chemical Properties

Appearance: Red/yellow outer metal casing pressed with black/grey/orange pyrotechnical ingredients.

Character	Value	Character	Value
pH (as supplied)	Not applicate	Pyrotechnic content density	Not Available
Melting point / freezing point (°C)	Not applicate	Decomposition temperature	>201
Initial boiling point and boiling range (°C)	Not applicate	Solubility in water (g/L) I	immiscible
Flash point (°C)	201/215	Partition coefficient n-octanol / water	Not Available
Auto-ignition temperature (°C)	Not Available	Viscosity (cSt)	Not applicate
Vapour pressure (kPa)		Upper Explosive Limit (%)	Not applicate
Relative density (Water = 1)	Not Available	Lower Explosive Limit (%) N	Not Available

10. Stability and reactivity

Reactivity See section 7.2

Chemical stability Product is considered stable under normal handling conditions.

Stable under normal storage conditions

Possibility of hazardous reactions: During the use Flame, heat, and smoke.

Conditions to avoid Shock, friction and ignition source

Incompatible materials: See section 7.2

Hazardous decomposition products: Not Available

11. Toxicological Information

(Under normal handling conditions and use)

Inhaled Not normally a hazard due to physical form of product. Inhalation of vapour is more likely at higher than normal temperatures. Smoke is discomforting (limit in air 6 mg/m³.)

Ingestion Not normally a hazard due to physical form of product. Considered an unlikely route of entry in commercial/industrial environments

Skin Contact Not normally a hazard due to physical form of product. Smoke is discomforting

Eye Not normally a hazard due to physical form of product. Smoke is discomforting

Chronic Generally not applicable. | Principal hazards are related to the explosive/ decomposition by products, if inadvertently discharged or launched without adequate control and safety measures in place.
 Normal exposure to the article by all route is considered practically non-harmful.

	Toxicity	Irritation
Floating Orange Smoke Signal 3 min	Not available	Not Available
potassium chlorate	dermal (rat) LD50: >2000 mg/kg[1] Oral (rat) LD50: 1870 mg/kg[2]	Nil reported
potassium nitrate	dermal (rat) LD50: >5000 mg/kg[1] Oral (rat) LD50: >2000 mg/kg[1]	Nil reported
Antimony Trisulphide	dermal (rat) LD50: >2000 mg/kg[2] Oral (rat) LD50: >2000 mg/kg[2]	Nil reported

1. Value obtained from Europe ECHA Registered Substances - Acute toxicity 2.* Value obtained from manufacturer's SDS. Unless otherwise specified data extracted from RTECS - Register of Toxic Effect of chemical Substances

Acute Toxicity	Data Not Available to make classification	Carcinogenicity	Data Not Available to make classification
Skin Irritation/Corrosion	Data Not Available to make classification	Productivity	Data Not Available to make classification
Serious Eye Damage/Irritation	Data Not Available to make classification	STOT - Single Exposure	Data Not Available to make classification
Respiratory or Skin sensitisation	Data Not Available to make classification	STOT - Repeated Exposure	Data Not Available to make classification
Mutagenicity	Data Not Available to make classification	Aspiration Hazard	Data Not Available to make classification

12. Ecological Information

Eco-toxicity: Not Available
 Mobility in soil Not Available
 Persistence and degradability Not Available
 Bio accumulative potential Not Available
 .Results of PBT and vPvB assessment Not Available
 Other adverse effects: No data available

13. Disposal Considerations

Product must not be thrown away, buried, discarded or placed with garbage.
 Product which are surplus, deteriorated or considered unsafe for transport, storage or use shall be destroyed and the statutory authorities shall be notified.
 This material may be disposed of by burning or detonation but the operation may only be performed under the control of a person trained in the safe destruction of explosives.
 Refer to local Waste Disposal Authority and supplier for suitable disposal

14. Transport information

Land Transport (ADR, RID, GGVSE)

Un number: 0507
 UN proper Shipping name Signals, Smoke
 Transport hazard class: 1.4S
 Hazard Label: 1.4
 Packing group Not applicable
 Environmental hazard Not applicable

Sea transport (Code-IMDG/GGVSee)

UN number: 0507

UN proper Shipping name Signals, Smoke
Transport hazard class: 1.4S
Hazard Label: 1.4
Packing group Not applicable
Environmental hazard Not applicable
EMS Number F-B, S-X

Air transport (ICAO-IATA/DGR)

UN number: 0507
UN proper Shipping name Signals, Smoke
Transport hazard class: 1.4S
Hazard Label: 1.4
Packing group Not applicable
Environmental hazard Not applicable
Cargo Only airplane

15. Regulatory Information

European and Local pyrotechnical legislation

16. Información adicional

The SDS is a Hazard Communication tool and should be used to assist in the Risk Assessment. Many factors determine whether the reported Hazards are Risks in the workplace or other settings. Risks may be determined by reference to Exposures Scenarios. Scale of use, frequency of use and current or available engineering controls must be considered.