

PRODUCT SAFETY DATA SHEET

SECTION 1: IDENTIFICATION

Product Name:	LIFESMOKE MK8 / RAUCHSIGNAL, ORANGE
Manufacturers Name:	PyroPol GmbH
Address:	Lippenhorstweg 29, 21514 Hornbek, Germany
Telephone No:	+49 – (0) 4158 – 89 00 73
Telefax No:	+49 – (0) 4158 – 89 00 97
Emergency Contact:	+ 44 (0) 1722 411611 (UK/EU and Rest of the World) + 001 703 527 3887 (Shipment to and from USA) + 800 424 9300 (Shipment inside USA)
Ref. No:	53685
Date of Issue:	September 2006
Issue No:	01
Description:	Pyrotechnic buoyant orange smoke signal emits bright orange smoke on firing. For outdoor day and night time use.

SECTION 2: INFORMATION OF INGREDIENTS

This device contains a pressed pyrotechnic composition as listed below. This composition cannot be converted to individual ingredients and is sealed inside the product.

INGREDIENTS	CAS	MASS PER PRODUCT
Potassium Chlorate	3811-04-9	<54 grams
Lactose	63-42-3	<42grams
Wax	8002-74-2	<30 grams
Oil	ZVG 530134	<10 grams
Smoke Orange	81-64-1	<66 grams
Pumice Stone Powder	--	< 3 grams
Rubber Arabicum	--	< 1 grams
Ethanol	64-17-5	< 1 grams
Water	7732-18-5	< 1 grams

SECTION 3: HAZARD IDENTIFICATION

This product represents low hazard in its unfired form. When fired the product emits an orange smoke which may cause irritation to the eyes and throat.

3.1 General Hazard:

- ❖ When fired, dense orange smoke is emitted from this product. Smoke exit becomes hot.
- ❖ Do not point (and fire) product at people or property.
- ❖ Keep out of reach of children.
- ❖ Do not fire in confined spaces. Product is designed for outdoor use only.
- ❖ In its unfired form, the product presents no hazard.
- ❖ Keep away from extreme heat.
- ❖ During function, avoid inhalation of smoke.

3.2 Health Hazards:

- ❖ If product is damaged, the contents may be harmful to skin, eyes and respiratory tract.
- ❖ Smoke produced may cause irritation to eyes and throat.

- ❖ Where this product is used for training purposes and therefore potential exposure increased, every effort must be made to ensure that personnel are upwind of the smoke.
- ❖ Medical conditions that may be aggravated by exposure to smoke are respiratory diseases that include Asthma and Emphysema.
- ❖ Risk of receiving burns during normal usage is highly unlikely.

3.3 Environmental Hazards:

- ❖ Dense orange smoke is produced on ignition of this product. Product should be fired in open space. Confined smoke can cause considerable stain damage to walls, soft furnishings and clothing material which cannot be easily cleaned.
- ❖ Products of combustion include dye, water, nitrogen, hydrogen, carbon, carbon dioxide and carbon monoxide

SECTION 4: FIRST AID MEASURES

Smoke inhalation from the smoke may cause irritation to eyes and throat. Move patient to fresh air.

- | | |
|-------------------------|---|
| 4.1 Inhalation: | having problems after inhaling smoke, consult a physician |
| 4.2 Eye Contact: | Flush with water at least 10 minutes. If symptoms persist seek medical advice. |
| 4.2 Ingestion: | Make patient drink water. Do not induce vomiting. Seek medical attention at once. |

SECTION 5: FIRE FIGHTING MEASURES

If exposed to flame units will burn and release large volumes of smoke and or hot gases.

5.1 Extinguishing Media:

- ❖ Once ignited units cannot be extinguished until all composition has been consumed. Use large volume of water to control burn.

5.2 Special protection gear:

- ❖ NONE

5.3 Fire Fighting Equipment:

- ❖ For fires in enclosed areas fire fighters must use self-contained breathing apparatus (SCBA)

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Safeguards:

- ❖ Keep product away from all sources of ignition.

6.2 Spillage:

- ❖ Collect all damaged and undamaged products and replace in original packaging for disposal. Loose composition should be treated with dry sand, carefully swept up and disposed of according to local authority regulations. The area should then be washed down with large volume of water.

6.3 Other Precautions:

- ❖ Contact appropriate emergency services.

SECTION 7: HANDLING AND STORAGE

Handle and store through United Nations UN approved packaging and procedures only.

7.1 Handling:

- ❖ Ensure that handle is retained in safe position at all times until such time as product is required for use.
- ❖ Handle with care.
- ❖ Do not attempt to dismantle this product.
- ❖ Follow printed instructions on this product at all times.

7.2 Storage

- ❖ Store in manufactures approved packaging in a well vintlated area away from sources of heat or direct sunlight.
- ❖ Temperature of storage to be between 5°C and 50°C

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1	Engineering Controls:	No specific controls necessary
8.2	Eye Protection:	No specific controls necessary
8.3	Skin Protection:	No specific controls necessary
8.4	Respiratory Protection:	No specific controls necessary
8.5	Personal Protective Equipment:	No specific controls necessary
8.6	General Hygiene Considerations:	Personal hygiene – wash hands after use.
8.7	Exposure Guidelines:	No exposure guidelines are available for this product.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Appearance:

Signal consists of a pull cord ignition and smoke composition. Product is water resistant.

9.2	Stability in Water:	Product is waterproof	9.3	Reaction with Water:	None
9.4	Odour:	None	9.5	Boiling Point:	N/A
9.6	State:	Solid	9.7	Vapour Pressure:	N/A
9.8	Vapour Density:	N/A	9.9	Evaporation Rate:	N/A
9.10	Melting point:	200°C	9.11	Solubility in water:	N/A
9.12	Specific Gravity:	N/A	9.13	pH:	N/A
9.14	Colour:	Various			

SECTION 10: STABILITY AND REACTIVITY

Pyrotechnic composition is sealed within the product, the product is stable and conforms to International requirements. Auto ignition temperature is greater than 200° C.

10.1	Stability:	This product is stable under normal conditions.
10.2	Incompatibility:	Solvents, hydrocarbons, petroleum based products.
10.3	Hazardous Decomposition:	N/A
10.4	Conditions to Avoid:	Avoid extreme heat, keep away from sources of ignition. Strong mechanical impact, e.g. pushing or throwing.
10.5	Hazardous Polymerisation:	N/A

SECTION 11: TOXICOLOGICAL INFORMATION

Under normal operating circumstances, there are no known acute toxic hazards resulting from single exposure the products of combustion from this Signal. However abuse or misuse of the product could result in situations where exposure to the combustion products could reach harmful levels in susceptible individuals.

11.1	Acute Toxicity:	None
11.2	Primary Irritation:	None
11.3	Sensitisation:	None
11.4	Additional toxicological indications:	None

SECTION 12: ECOLOGICAL INFORMATION

There is no information available at the present time relating to ecological effects for this product.

SECTION 13: DISPOSAL

- 13.1 Fired Products:**
Subject to local authority arrangements.
- 13.2 Time Expired Products:**
Return to Pains Wessex / COMET / PyroPol or distributor or local police, fire or coastguard forces as permitted by local regulations for disposal or recycling.
- 13.3 Damaged Products:**
Repack in original packaging and treat as time expired

DO NOT ATTEMPT TO DISMANTLE THIS PRODUCT

SECTION 14: TRANSPORT INFORMATION

14.1	Packaging Specification:	PS
14.2	UN Hazard Code:	1.4S
14.3	UN Number:	0432
14.4	UN Name:	Articles, Pyrotechnics
14.5	IMCOL:	N/A
14.6	NATO Stock No.:	N/A

SECTION 15: REGULATORY INFORMATION

15.1	Classification:	Explosive. UN Class 1.
15.2	Hazard Symbol:	Orange Diamond – Explosive, on outer packaging.
15.3	Risk Phrases:	N/A
15.4	Safety Phrases:	N/A

SECTION 16: OTHER INFORMATION


The product is designed for use in emergency situations. When user instructions are followed, this product presents minimal risk to the user and those in the general vicinity.

The above information is given based on the present state of our knowledge of this product and at the time of publication, it is given in good faith. No warranty is implied with respect to the quality or the specification of this product. The user must satisfy themselves that the product is entirely suitable for their purpose.

Signed



Olaf Flemming
Quality Management Manager

PACKING SPECIFICATION		PAGE 1 OF 3	
ISSUE 01__6339-WSG			
PRODUCT	LIFESMOKE MK8		
DRAWING No.	ORS95	DRAWN: OFL	CHECK: TK
ISSUE	01	DATE: 06.2005	DATE: 07.2005
DATE	20.07.2005		
REG. No.			
SHIPPING SIZE ENVELOPE:	432 x 345 x 300 mm	QTY TO BE PACKED UP TO: 60	
SHIPPING WEIGHT:	23 kg	MAXIMUM NET WEIGHT:	22 kg
N.E.C EACH	0,200 kg		
UN PACKING METHOD:	P135	BAM CLASSIFICATION No: 6339-WSG	
HAZARD CLASS	1.4S		
U.N. NUMBER 0432	0432		
PROPER SHIPPING NAME:	ARTICLES, PYROTECHNIC		
SHIPPING METHOD:	PASSENGER & CARGO AIRCRAFT, SEA & ROAD FREIGHT		
PACKING MATERIALS			
			QTY
1	TRIPLE WALL FIBREBOARD BOX 415 x 207 x 436 mm		1
2	RASTER BUFFER (60)		1
3	50 mm VINYL TAPE TESA 4104		A / R
4	INFO MARKING: HAZARD WARNING LABEL 1.4S, UN-No. PRINTED		
UN BOX NUMBER:			
		 4G/Y26/S/./D/BAM 6339-WSG	

PACKING SPECIFICATION
ISSUE 01__6339-WSG

PAGE 2 OF 3

PACKING METHOD

ASSEMBLING RASTER BUFFER (ITEM 3)

1. STICK TOGETHER THE 7 PCS. RASTER BUFFER TO A BOX SYSTEM.

PACKING METHOD

PACKING OF TRIWALL BOX (ITEM 2)

1. INSERT RASTER BUFFER (ITEM 1, PACKING METHOD A) INTO THE ASSEMBLED BOX.
2. INSERT 3 LAYERS EACH 20 UNITS INTO THE ASSEMBLED BOX.
3. CLOSE AND SEAL THE BOX WITH THE TESA TAPE (ITEM 4)
4. MARK IN ACCORDANCE WITH CUSTOMERS INSTRUCTIONS.

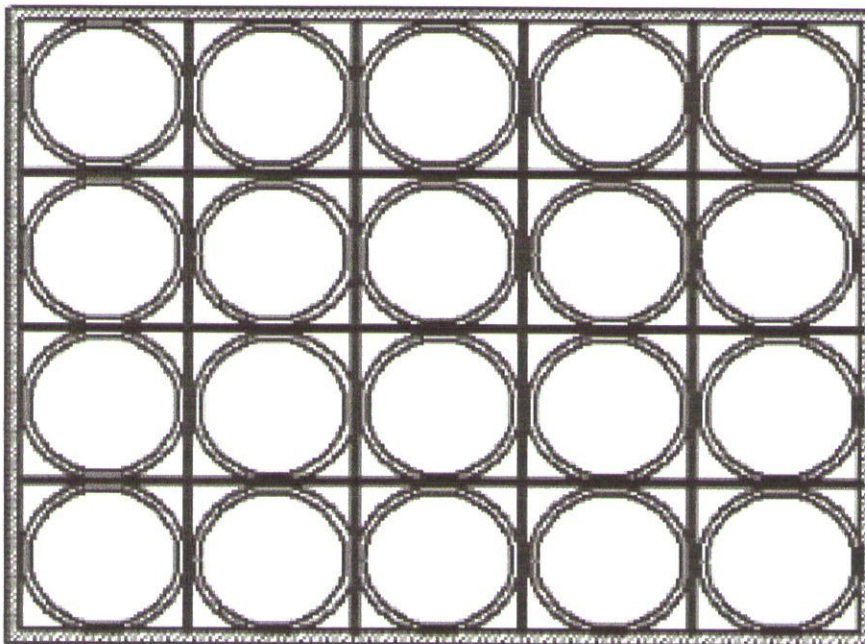
53685

All
0.200
kg

LIFESMOKE MK8

QRS FIG. 1

PLAN VIEW OF BOX



QRS FIG. 2

