MISTRAL DETECTION LTD.

TEL: +972-9-9568212 FAX: +972-9-9568141



# **Safety Data Sheet**

# 1: Identification

Name: GSPR-3

Class: Flammable gas (2.1)

**Company:** MISTRAL DETECTION LTD.

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For the detection of gun powder residues.

## 2: Composition/Information on Ingredients

Appearance: Aerosol contains colorless odorless liquid, soluble in water.

#### **Composition:**

Ingredients Percent w/w Sulphanilamide {000063-74-1} 2 Orto Phosphoric acid {007664-38-2} 5

Water 55-60

Propellant (LPG) {068476-85-7} 30-35

### 3: Hazards Identification

Extremely flammable.

Causes severe burns.

Irritating to eyes, respiratory system and skin.

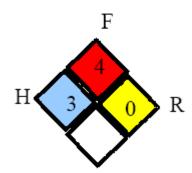
Harmful if swallowed.

Carcinogenicity: No data available

**IDLH:** 1000 mg/m<sub>3</sub> NIOSH 1995 (Phosphoric acid)

2000 ppm NIOSH 1995 (LPG)

For more information about symptoms in exposure – see paragraph 4. For more data about chemical reaction and incompatibles – see paragraph 10. Health (H) Flammability (F) Reactivity (R) in scale 0 (not hazardous) till 4 (extremely hazardous).



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## 4: First Aid Measures

**Symptoms**: Causes burns on contact, irritating to eyes, respiratory tract and skin.

**Skin**: Remove immediately contaminated clothing and shoes unless stacked to the skin. Rinse with large amounts of water and mild soap for at least 10 minutes. Locate possible signs of burns and refer to medical attention if necessary.

**Eyes**: Rinse opened eyes under running water for at least 15 minutes. Water must be at body temperature. Refer to medical attention from fear of delayed damage.

**Ingestion**: Do NOT induce vomiting. If victim is conscious, have him drink water. Refer for medical attention as necessary. Do not administer liquids to unconscious persons.

**Inhalation**: Using protective gear, evacuate victim from site of exposure. Have victim lie or sit comfortably. If he has difficulty breathing, have him sit with back straight and administer oxygen, if possible. If victim is unconscious, perform resuscitation and immediately transfer to medical personnel.

## 5: Fire-Fighting Measures

Danger of fire or combustion.

Extinguishing media: CO<sub>2</sub>, foam, sand.

Use water spray to keep fire-exposed- containers cool, long after the fire is out. Vapors are flammable and much heavier than air (heavy gas), may travel long distances along ground before igniting and flashing back to vapor source, or may explode. In case of fire, use full protective gear and a self-contained breathing apparatus.

#### **6: Accidental Release Measures**

Spills from aerosols cans are unlikely and are generally of small volume. In case of actual spill or rupture wear full protective gear including self-contained breathing apparatus. Avoid

possible contact with the material. Ventilate the area. Flammable liquid. Keep away from possible sources of ignition, heat and sparks. Stop the leakage if you can do it without risk

Absorb the chemical onto sand, vermiculite or absorption sleeves, scoop into containers for disposal, according to local regulations. Wash the spill area with water and soap.

#### 7: Handling and Storage

Keep away from incompatible materials (see section 10).

Contains combustible gas. Keep away from sources of fire, sparks, static electricity, friction or any other heat source that may cause ignition.

Keep in ventilated area. In areas of storage and use, it is advisable that the electrical system will be adjusted to working in an explosive atmosphere. In areas of storage of gas cylinders or tanks, it is advisable to setup sprinklers system to cool the containers in case of fire. Do not pungent or damage pressurized packages, even if it is small packages.

#### Safety phrases:

Keep containers in a well-ventilated place.

Keep away from sources of ignition. NO SMOKING!

Do not breathe gas or fumes or spray.

Avoid contact with skin and eyes.

Wear suitable protective clothing.

Do not expose to temperatures exceeding 50°C. Store in a cool place.

Do not store in metal containers.

#### 8: Exposure Control and Personal Protection

**Thresholds:** Exposure limits (LPG)

PEL-OSHA for 8 hours 1000 ppm (TWA)

TLV-ACGIH for 8 hours 1000 ppm (TWA)

REL-NIOSH for 8 hours 1000 ppm (TWA)

Exposure limits (Phosphoric acid)

PEL-OSHA for 8 hours 1 mg/m<sub>3</sub> (TWA) for short time 3 mg/m<sub>3</sub> (STEL)

TLV-ACGIH for 8 hours 1 mg/m3 (TWA) for short time 3 mg/m3 (STEL)

REL-NIOSH for 8 hours 1 mg/m<sub>3</sub> (TWA) for short time 3 mg/m<sub>3</sub> (STEL)

**Protective equipment:** Generally, personal protection is a function of exposure. It is recommended to use safety spectacles or goggles, working shoes, working clothes or lab coat. Working should be done in a well ventilated area.

In addition: mask and filter, full protective gear for corrosive material: protective cloth, boots, gloves and breathing apparatus according to the level of exposure.

**In case of an emergency:** Full protective gear and a breathing apparatus should be used, according to the severity.

#### 9: Physical and Chemical Properties:

**Boiling point** °C: 0-100 (liquid phase)

**Melting point** °**C:** <-10 **Molecular weight:** Mixture

Density gr/cm<sub>3</sub>: ~1

**Evaporation rate (Butyl acetate):** >1

Vapor density (air=1): >1

Vapor pressure (mm Hg): 2400 @ 20°C

**Solubility (in water):** Soluble

pH: 0.5 Acidic

Flash point °C: -74 (LPG)

**Auto-ignition temperature** °C: 450 approximately

**LEL:** 1.8% (LPG) **UEL**: 8.4% (LPG)

#### 10: Stability and Reactivity

Hazardous polymerization: Will not occur.

Chemical reactivity: Extremely flammable. Easily ignites in contact with sources of heat,

sparks or flame. May react with oxidizing materials, bases and metal powder.

Hazardous decomposition products: On fire emits nitrous oxides, phosphorous oxides

and

irritating fumes.

## 11: Toxicological Information

LD50 (Oral rat) 1530 mg/kg

LD50 (Dermal rabbit) 2740 mg/kg

## **12: Ecological Information**

**Environmental hazards**: The gas (LPG) may affect the greenhouse effect. The material is toxic to aquatic organisms.

**Biodegrability**: The gas (LPG) does not bioaccumulate. It slowly oxidizes in air. The liquid phase leaches in ground and may contaminate groundwater.

#### 13: Disposal Considerations

According to the Israeli regulations, a holder of this waste must evacuate it as soon as possible and not late than 6 months after the production of the waste, to the Ramat-Hovav waste site. The waste should be packed and transported according to the regulations. For packing group and transport classification of the waste refer to section 14.

According to the Israeli regulations, industrial spillage into the sewage system will not contain: any solid, liquid or gas, which may cause fire or explosion terms in the sewage system; Liquid which has level of pH below 6 or higher than 9. For additional information, check local regulations.

#### **14: Transport Information**

RID/ADR: UN 1950; AEROSOL, containing flammable gas. Class 2.1

UN recommendations: UN 1950; AEROSOL, containing flammable gas. Class 2.1;

LABEL 'FLAMMABLE GAS'; HAZCHEM: 2WE (ORANGE BOOK 12).

IMCO: UN 1950; AEROSOL, containing flammable gas. Class 2.1

#### 15: Regulatory Information

Listed in the Israeli Hazardous Material regulations under "Liquefied petroleum gas". This hazardous material, when in quantity less than 8000 kg is classified as Hazmat type B.

According to the Israeli dangerous goods regulations of 1996 and dangerous goods law of 1993, holders of poison type A, or up to 40 type B hazardous materials are not subject to some of the regulations concerning toxic-permit and hazardous material registrations. For further details refer to the dangerous substances law and regulations.

For this material, no ejection regularity was found.

Listed in the Israeli Hazardous Material regulations under "Phosphoric acid".

This hazardous material, when in concentration less or equal to 10% is classified as Hazmat type A.

This hazardous material, when in quantity less than 100 kg is classified as Hazmat type B.

According to the Israeli dangerous goods regulations of 1996 and dangerous goods law of 1993, holders of poison type A, or up to 40 type B hazardous materials are not subject to some of the regulations concerning toxic-permit and hazardous material registrations. For further details refer to the dangerous substances law and regulations.

For this material, no ejection regularity was found.

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Possession of flammable gas in quantity over 250 liters (water volume), requires from the holder to have an emergency plan, according to the Israeli business' license law and regulations of 1993.

## **16: Other Information**

Risk phrases: *R12*, *R35*, *R36/37/38*, *R22* Safety phrases: *S09*, *S16*, *S23*, *S24/25*, *S36* 

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The information herein is based on the present state of our knowledge. It is believed to be correct but is not necessarily all inclusive and shall be used only as a guide. Mistral Detection Ltd. and Haz-Mat Ltd. shall not be held liable for any damage resulting from handling or from contact with the above product. For further information, contact Mistral Detection Ltd, at the telephone given in the 1st section, or contact Haz-Mat at hazmat@hazmat.co.il

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