

SAFETY DATA SHEET	 MISTRAL DETECTION LTD.
Pen test D4D	1 of 6

Safety Data Sheet

1: Identification

Name: PEN TEST – D4D

Class: Methyl ethyl ketone. Class 3 Packing group II

Uses to detect illicit drugs



2: Composition/Information on Ingredients

Appearance: Plastic tube containing OSG ampoule filled with colorless liquid.

Composition:

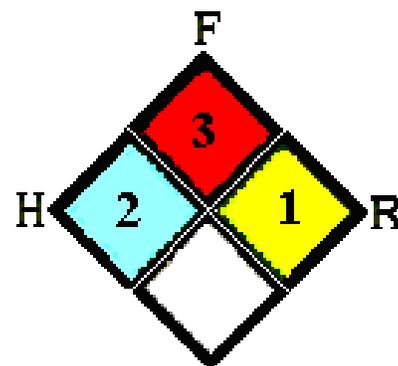
Ingredients	Percent w/w
Methyl Ethyl Ketone {78-93-3}	>99.9
Active ingredient	<0.1

3: Hazards Identification

Extremely Flammable Liquid and vapors. Vapors may cause flash fire.

Harmful or fatal if swallowed. Harmful if inhaled or absorbed through skin. Affects central nervous system. Causes irritation to skin, eyes and respiratory tract.

Carcinogenicity: No data available



Health (H) Flammability (F)
Reactivity (R) in scale 0 (not hazardous)
till 4 (extremely hazardous).

4: First Aid Measures

- Symptoms:** Irritating to eyes, respiratory tract and skin.
- Skin:** In case of skin contact, flush with copious amounts of water for at least 15 minutes. Remove contaminated clothing and shoes. Immediately flush skin with plenty of soap and water for at least 15 minutes while removing contaminated clothing and shoes. Get medical attention. Wash clothing before reuse. Thoroughly clean shoes before reuse.
- Eyes:** Vapors are irritating to the eyes. Splashes can produce painful irritation and eye damage. Immediately flush eyes with plenty of water for at least 15 minutes, lifting upper and lower eyelids occasionally. Get medical attention.
- Ingestion:** May produce abdominal pain, nausea. Aspiration into lungs can produce severe lung damage and is a medical emergency. Other symptoms expected to parallel inhalation. Aspiration hazard. If swallowed, vomiting may occur spontaneously, but DO NOT INDUCE. If vomiting occurs, keep head below hips to prevent aspiration into lungs. Never give anything by mouth to an unconscious person. Call a physician immediately.
- Inhalation:** Causes irritation to the nose and throat. Concentrations above the TLV may cause headache, dizziness, nausea, shortness of breath, and vomiting. Higher concentrations may cause central nervous system depression and unconsciousness. If breathing is difficult, give oxygen. Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

Chronic Exposure: Prolonged skin contact may defeat the skin and produce dermatitis. Chronic exposure may cause central nervous system effects.

Aggravation of Pre-existing Conditions: Persons with pre-existing skin disorders or eye problems or impaired respiratory function may be more susceptible to the effects of the substance

5: Fire-Fighting Measures

Extremely Flammable.

Extinguishing media: Dry chemical, foam or carbon dioxide. Water spray may be used to keep fire exposed containers cool, dilute spills to nonflammable mixtures, protect personnel attempting to stop leak and disperse vapors.

Special Information: Explosion: Above flash point, vapor-air mixtures are explosive within flammable limits noted above. Vapors can flow along surfaces to distant ignition source and flash back. Contact with strong oxidizers may cause fire. Sealed containers may rupture when heated. Sensitive to static discharge.

In the event of a fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full face piece operated in the pressure demand or other

positive pressure mode. This highly flammable liquid must be kept from sparks, open flame, hot surfaces, and all sources of heat and ignition

Special protective Equipment for firefighters:

Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

6: Accidental Release Measures

Ventilate area of leak or spill. Remove all sources of ignition. Wear appropriate personal protective equipment as specified in Section 8. Isolate hazard area. Keep unnecessary and unprotected personnel from entering. Contain and recover liquid when possible. Use non-sparking tools and equipment.

Environmental precautions:

Do not allow material to enter drains or water courses. Avoid contaminating sewer and waterways with this material. US Regulations (CERCLA) require reporting spills and releases to soil, water and air in excess of reportable quantities.

Methods for cleaning up:

Collect liquid in an appropriate container or absorb with an inert material (e.g., vermiculite, dry sand, earth), and place in a chemical waste container. Do not use combustible materials, such as saw dust. Do not flush to sewer! If a leak or spill has not ignited, use water spray to disperse the vapors, to protect personnel attempting to stop leak, and to flush spills away from exposures. Ventilate area and wash spill site after material pickup is complete.

7: Handling and Storage

Handling:

Avoid inhalation. Avoid contact with eyes, skin, and clothing. Avoid prolonged or repeated exposure.

Storage:

Store in cool dry place. Keep container closed. Keep away from heat, sparks, and open flame.

8: Exposure Control and Personal Protection

ENGINEERING CONTROLS

Safety shower and eye bath. Use nonsparking tools. Use only in a chemical fume hood. Mechanical exhaust. Ground all equipment, vessels, tables, and other metallic objects that may come into contact with the product.

GENERAL HYGIENE MEASURES

Wash thoroughly after handling. Remove and wash contaminated clothing promptly.
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Exposure limits

ACGIH Threshold Limit Value (TLV): 200 ppm (TWA), 300 ppm (STEL)

Airborne Exposure Limits: OSHA Permissible Exposure Limit (PEL): 200 ppm (TWA)

Protective equipment:

Respiratory Protection: Government approved respirator.

Hand Protection: Compatible chemical-resistant gloves.

Eye Protection: Chemical safety goggles or a full face shield where splashing is possible. Maintain eye wash fountain and quick-drench facilities in work area.

9: Physical and Chemical Properties:

Appearance: Clear, colorless liquid.

Odor: Sharp mint-like odor

Boiling point °C: 80

Melting point °C: -86

Molecular weight: 116

Density gr/cm³: ~ 0.81

Evaporation rate (Butyl acetate=1): 2.7

Vapor density (air=1): 2.5

Vapor pressure (mm Hg) @ 20C: 78

Solubility (in water): Soluble, 29 g in 100 g of water.

Solubility Other Solvents: ACETONE, ETHER, PROPYLENGLYCOL

pH: N/A

Flash point °C: -9

Auto-ignition temperature °C: 404

LEL: 1.4%

UEL: 11.4%

10: Stability and Reactivity

Stability: Stable.

Material to avoid: Oxidizing materials, caustics, amines, ammonia, strong bases, chloroform, chlorosulfonic acid, oleum, potassium-t-butoxide, hydrogen peroxide, nitric acid.

Can attack many plastics, resins and rubber.

Hazardous polymerization: Will not occur.

Hazardous decomposition products: Carbon monoxide, Carbon dioxide, Nitrogen oxides, Hydrogen chloride gas.

Conditions to Avoid: Heat, flames, ignition sources and incompatibles.

11: Toxicological Information

Oral rat LD50: 2737 mg/kg;

Inhalation rat LC50: 23,500 mg/m³/8-hr;

Skin rabbit LD50: 6480 mg/kg; investigated as a mutagen, reproductive effector.

Reproductive Toxicity: Has shown teratogenic effects in laboratory animals.

12: Ecological Information

When released into the soil, this material may leach into groundwater.

When released into the soil, this material may evaporate to a moderate extent. When released into water, this material may biodegrade to a moderate extent. When released into water, this material may evaporate to a moderate extent. When released into water, this material is expected to have a half-life between 10 and 30 days.

This material is not expected to significantly bioaccumulate.

When released into the air, this material is expected to be readily degraded by reaction with photochemically produced hydroxyl radicals. When released into the air, this material is expected to have a half-life between 1 and 10 days.

Environmental Toxicity: This material is not expected to be toxic to aquatic life. The LC50/96-hour values for fish are over 100 mg/l.

13: Disposal Considerations

Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber. Observe all federal, state, and local environmental regulations.

According to the Israeli regulations, a holder of this waste must evacuate it as soon as possible and not later 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

IATA: UN1193;

Proper Shipping Name: Methyl ethyl ketone.

Class 3

Packing group II

Marine Pollutant: No

Severe Marine Pollutant: No

15: Regulatory Information

Chemical Inventory Status:

TSCA	EC	Japan	Australia	Korea	DSL	NDSL	Phil.
Yes	Yes	Yes	Yes	Yes	Yes	No	Yes

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.

16: Other Information

Label Hazard Warning: DANGER! EXTREMELY FLAMMABLE

Risk phrases: **R10, R66/67/36**

Safety phrases: **S25/26 R36**

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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 shall not be held liable for any damage resulting from handling or from contact with the above product. For further information contact Mistral at the telephone given in the 1st section.