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Safety Data Sheet

1: Identification

Name: Pen-Test C&H

Proper shipping name: UN 1993; Flammable liquid, n.o.s ,

Class: Class 3 Packing group III

Intended use: reagent for the detection of illicit drugs.



2: Composition/Information on Ingredients

Appearance: 2 OSG ampoules each contain liquid.

Composition:

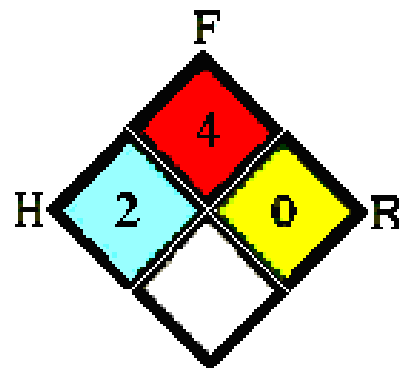
Ingredients	Percent w/w
Butyl acetates {123-86-4}	>49
Distilled water	<28
2 butanol {78-92-2}	11.3
IPA {21388-65-8}	<11
Active ingredient	<1

3: Hazards Identification

Highly Flammable. Repeated exposure may cause skin dryness or cracking.

Vapors may cause drowsiness and dizziness.

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. Call a physician.
Eyes:	In case of contact with eyes, flush with copious amounts of water for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers. Call a physician.
Ingestion:	If swallowed, wash out mouth with water provided person is conscious. Call a physician immediately.
Inhalation:	If inhaled, remove to fresh air. If not breathing give artificial respiration. If breathing is difficult, give oxygen.

5: Fire-Fighting Measures

Extinguishing media: Suitable: Water spray. Carbon dioxide, dry chemical powder, or appropriate foam.

Special Risks:

Flammable liquid. Vapor may travel considerable distance to source of ignition and flash back. Emits toxic fumes under fire conditions.

Explosion Hazards: Vapor may travel considerable distance to source of ignition and flash back. Container explosion may occur under fire conditions. Forms explosive mixtures in air.

Special protective Equipment for firefighters:

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

6: Accidental Release Measures

Evacuate area. Shut off all sources of ignition. Evacuate area and keep personnel upwind.

Procedures of personal precautions:

In case of actual spill or rupture exercise appropriate precautions to minimize direct contact with skin or eyes and prevent inhalation of vapors. Evacuate area, shut off all sources of ignition. Use non-sparking tools. Wear respirator, chemical safety goggles, rubber boots, and heavy rubber gloves. Wear self-contained breathing apparatus, rubber boots, and heavy rubber gloves.

Environmental precautions:

Do not allow material to enter drains or water courses. Avoid contaminating sewer and waterways with this material.

Methods for cleaning up:

Cover with dry-lime, sand or soda ash. Place in covered container using non-sparking tools and transport outdoors. 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.

Exposure limits-USA (Butyl Acetate)

Source	Type	Value
ACGIH	TWA STEL	150,200 ppm
OSHA	TWA STEL	150,200 ppm
NIOSH		10,000 ppm

Exposure limits-UK (Butyl Acetate)

Source	Type	Value
OEL	OEL	724mg/m ³
		150 ppm
OEL	STEL	966 mg/m ³
		200 ppm

Exposure limits-Norway (Butyl Acetate)

Source	Type	Value
OEL	TWA	355mg/m ³
		75ppm

Exposure limits-Poland (Butyl Acetate)

Source	Type	Value
NDSCh		950 MG/M ³
	NDS	200 MG/M ³
	NDSP	-

Protective equipment:

Respiratory Protection: Government approved respirator.

Hand Protection: Compatible chemical-resistant gloves.

Eye Protection: Chemical safety goggles.

9: Physical and Chemical Properties:

Boiling point °C (Isopropyl Alcohol): 82.4°C

Melting point °C: N/A

Density gr/cm³: ~ 1.07

Evaporation rate (Butyl acetate): No data

Vapor density (air=1): >1

Vapor pressure (bar@ 20°C): N/A

Solubility (in water): Soluble

Solubility Other Solvents: ACETONE, ETHER, PROPYLENGLYCOL

pH: N/A

Flash point °C (Butyl Acetate & Butyl Alcohol): 24°C

Auto-ignition temperature °C: N/A

LEL: (Butyl Acetate & Butyl Alcohol): 1.7% V/V

UEL: (Butyl Acetate): 7.6% V/V

10: Stability and Reactivity

Stability: Stable.

Material to avoid: Oxidizing agents, Strong reducing agents, Acids, Acid anhydrides.

Hazardous polymerization: Will not occur.

Hazardous decomposition products: Carbon monoxide, Carbon dioxide.

11: Toxicological Information

Butyl Alcohol:

Oral rat LD50: 6480 mg/kg;
Irritation data: eye, rabbit: 100mg/24H Moderate;
Investigated as a reproductive effecter.

IPA:

SIGNS AND SYMPTOMS OF EXPOSURE

Can cause CNS depression. Prolonged exposure can cause: Nausea, headache, and vomiting. Narcotic effect. To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

ROUTE OF EXPOSURE

Skin Contact: Causes skin irritation. Prolonged or repeated exposure to skin causes defatting and dermatitis.

Eye Contact: Causes severe eye irritation.

Inhalation: Material is irritating to mucous membranes and upper respiratory tract.

Multiple Routes: May be harmful by inhalation, ingestion, or skin absorption.

TARGET ORGAN INFORMATION

Nerves. Kidneys. Cardiovascular system. G.I. System.

Butyl Acetate:

RTECS NUMBER: AF7350000

ACUTE TOXICITY

LD50

Oral

Rat

*

LC50

Inhalation

Rat

9.6 MG/L TO >29.2 MG/L

4 HRS

LD50

Skin, Rabbit 17,600 mg/kg

LD50

Oral, Rat 10768 mg/kg

Remarks: Behavioral:Somnolence (general depressed activity).

Lungs, Thorax, or Respiration:Other changes. Liver:Other changes.

LC50

Inhalation, Rat 390 ppm

4H

Remarks: Behavioral:Change in motor activity (specific assay).
Lungs, Thorax, or Respiration:Acute pulmonary edema. Blood:
Hemorrhage.

LD50

Oral, Mouse 6000 mg/kg

LC50

Inhalation, Mouse 6,000 mg/m³
2H

LD50

Intraperitoneal, Mouse 1230 MG/KG

LD50

Oral, Rabbit 3200 mg/kg

LD50

Skin, Rabbit > 17600 mg/kg

LD50

Oral, Guinea pig 4700 mg/kg

LD50

Oral, Mammal 4300 mg/kg

LC50

Inhalation, Mammal 40,000 mg/m³

IRRITATION DATA

Eyes, Rabbit

Remarks: Moderate irritation effect

Eyes, Human 300 ppm

Skin, Rabbit 500 mg

24H

Remarks: Moderate irritation effect

Eyes, Rabbit 100 mg

Remarks: Moderate irritation effect

12: Ecological Information

Butyl Alcohol

Environmental Fate:

When released into the soil, this material is expected to readily biodegrade. When released

into the soil, this material is expected to leach into groundwater. When released into the soil, this material is expected to quickly evaporate. When released into water, this material is expected to readily biodegrade. When released to water, this material is expected to quickly evaporate. When released into the water, this material is expected to have a half-life between 1 and 10 days. This material is not expected to significantly bioaccumulate. This material has an estimated bioconcentration factor (BCF) of less than 100. This material has a log octanol-water partition coefficient of less than 3.0. 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 not expected to be degraded by photolysis. When released into the air, this material is expected to be readily removed from the atmosphere by wet deposition. When released into the air, this material is expected to have a half-life between 1 and 10 days.

Environmental Toxicity:

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

Butyl Acetate

ECOTOXICOLOGICAL EFFECTS

Test Type: EC50 Algae

Time: 24 h

Value: 1,200 mg/l

Test Type: EC50 Daphnia

Species: *Daphnia magna*

Time: 24 h

Value: 72.8 - 205 mg/l

Test Type: LC50 Fish

Species: *Lepomis macrochirus* (Bluegill)

Time: 96 h

Value: 100 mg/l

Test Type: LC50 Fish

Species: *Leuciscus idus*

Time: 48 h

Value: 64 - 121 mg/l

Test Type: LC50 Fish

Species: *Pimephales promelas* (Fathead minnow)

Time: 96 h

Value: 17 - 19 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

RID/ADR: UN 1993; Flammable liquid, n.o.s. Class 3 Packing group III

IATA: UN 1993; Flammable liquid, n.o.s. Class 3 Packing group III

IMDG: UN 1993; Flammable liquid, n.o.s. Class 3 Packing group III

15: Regulatory Information

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

CLASSIFICATION AND LABELING ACCORDING TO EU DIRECTIVES ANNEX I INDEX NUMBER: 607-025-00-1, NOTA: 6

Risk phrases: ***R10, R11, R66/67***

Safety phrases: ***S7, S16, S25***

Date of issue: 01 June 2008

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 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.