SAFETY DATA SHEET



Pen test C&H

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Complying with 1907/2006/EEC Regulation of 18 December 2006 ("REACH Regulation")

Section 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Identification of the substance/preparation

Product name: Pen test C&H Trade names: Pen test C&H Catalog number: 01218

Product type: Plastic dripper contains 2 OSG's filled with blue and green liquid

REACH registration no(s): N/A

Common/important uses of the substance/preparation: To detect presence of drugs.

Company/undertaking identification:

MISTRAL SECURITY INC. 7910 Woodmont Ave, Ste 820

TEL: (301) 913-9366 FAX: (301) 913-9369

E-mail address of person responsible for this SDS:

Emergency telephone number (including hours of operation):

Section 2. HAZARDS IDENTIFICATION

This substance/preparation is classified according to Directive 67/548/EEC or 1999/45/EC

Physical/chemical hazards:

R11:Highly Flammable

R36: Irritating to the eyes

R52/53: Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment

R66: Repeated exposure may cause skin dryness or cracking

R67: Vapors may cause drowsiness and dizziness

See section 11 for more detailed information on health effects and symptoms.

Section 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance/preparation:

Ingredient name	CAS number	EC number	%	Classification
Butyl acetate	123-86-4	204-658-1	49.14%	R10 R66, R67
Deionized water	-	1	27.92%	-

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2-Butanol	78-92-2	201-158-5	11.31%	R10 Xi; R36/37 R67		
Isopropyl alcohol	67-63-0	200-661-7	10.89%	F; R11 Xi; R36 R67		
Active ingredient	-	-	0.74%	-		
See section 16 for the full text of the R-phrases [Hazard statements] declared above						

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in section 8.

Section 4. FIRST AID MEASURES

Eyes contact: In case of contact with eyes, rinse immediately with running water. Get medical

attention if irritation occurs.

Skin contact: Avoid prolonged or repeated contact with skin. After handling, always wash hands

thoroughly with plenty of water. Get medical attention if irritation develops.

Inhalation: Remove from site of exposure to fresh air. If breathing is difficult give oxygen. If not

breathing give artificial respiration. Get medical attention.

Ingestion: If large quantities of this material are swallowed, call a physician immediately. Do not

induce vomiting unless directed to do so by medical personnel. Never give anything by

mouth to an unconscious person.

Notes to physician: No specific antidote, medical staff contacts Poisons Information Center. All treatments should be based on observed signs and symptoms of distress in the patient. Consideration should be given to the possibility that overexposure to materials other than this product may have occurred.

See section 11 for more detailed information on health effects and symptoms.

Section 5: FIRE-FIGHTING MEASURES

Extinguishing media

<u>Suitable</u>: Use water spray, carbon dioxide or dry chemical. For larger fires use water spray or alcohol resistant foam.

Not suitable: Water with full jet.

Special exposure hazards: Formation of explosive air/vapor mixtures are possible. Vapors can travel to a source of ignition and flash back.

Hazardous thermal decomposition products:

Hazardous decomposition products formed under fire conditions: Under fire emits oxides of cobalt, oxides of nitrogen, amines, corrosive and very toxic fumes of hydrogen bromine, very toxic fumes of hydrogen cyanide, oxides of sulfur and other irritating and toxic fumes.

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Special protective equipment for fire fighters: Fire fighters should wear full protective clothing and self-contained breathing apparatus in positive pressure mode.

Remark: Move containers from fire area if possible to do so without risk. Cool all affected containers with flooding quantities of water. Use water spray to cool fire exposed containers.

Section 6: ACCIDENTAL RELEASE MEASURES

Personal precautions: Wear protective clothing. Avoid contact with skin eyes and inhalation of vapors. Ventilate area of spill.

Environmental precautions: Do not let this chemical enter the environment. Keep away from drains, surface and ground water.

Methods for cleaning up

<u>Small spill:</u> Absorb the chemical onto sand, vermiculite, or any other non-combustible absorbent, and collect into containers for later disposal.

Large spill: As for small spill

Personal Protection in Case of Large Spill: Safety glasses. Full suit. Suitable respirator. Boots. Gloves. A self- contained breathing apparatus should be used to avoid inhalation of the product.

Section 7: HANDLING AND STORAGE

Handling: Do not breathe vapors. Avoid contact with skin and eyes. Avoid inhalation of vapor or mist. Wash thoroughly after handling. Do not permit eating/drinking/smoking near the material.

Storage: Store in cool, dry and well ventilated place. Keep containers tightly closed. Store and use away from heat, sparks, open flame or any other ignition source. Avoid contact oxidizing agents, acids, acids chlorides, acid anhydrides. Protect against electrostatic charges. Packaging materials Recommended: Use original container.

Specific use(s): N/A

Section 8: EXPOSURE CONTROL / PERSONAL PROTECTION

Exposure limit values:

Ingredient name	Occupational exposure limits
	ACGIH-TLV 200 ppm (TWA), 400 ppm (STEL)
Jaansanyi alaahai	OSHA-PEL 400 ppm (TWA)
Isopropyl alcohol	GERMAK 500 mg/m³ (TWA)
	NIOSH-REL 400 ppm (TWA), 500 ppm (STEL)
	ACGIH-TLV 150 ppm (TWA), 200 ppm (STEL)
Putul agatata	OSHA-PEL 150 ppm (TWA)
Butyl acetate	GERMAK 480 mg/m ³ (TWA)
	NIOSH-REL 150 ppm (TWA), 200 ppm (STEL)
	ACGIH-TLV 100 ppm (TWA)
2-Butanol	OSHA-PEL 150 ppm (TWA)
	NIOSH-REL 100 ppm (TWA), 150 ppm (STEL)

Exposure controls

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Occupational exposure controls: Use process enclosures, local exhaust ventilation, or others engineering controls to keep airborne levels below recommend exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

<u>Respiratory protection:</u> Suitable respirator. Be sure to use an approved/certified or equivalent. Wear appropriate respirator when ventilation is inadequate.

<u>Hand protection:</u> Wear protective disposable gloves to prevent skin exposure.

Eye protection: Wear protective safety glasses - goggles.

Skin protection: Wear appropriate long-sleeved clothing to minimize skin contact.

<u>Hygiene measures:</u> Keep away from foodstuffs and beverages. Do not eat, drink or smoke during work time. Remove soiled or soaked clothing immediately. Clean skin thoroughly after work; apply skin cream. During use, provide suitable ventilation.

Environmental exposure controls: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

General information:

Appearance: Liquid, green-blue

Odour: N/A

Odour threshold: N/A

pH: 5 (5 g/l) at 20°C (butyl acetate)

Melting point/Freezing point: -76°C (butyl acetate)

Initial boiling point/boiling range: 124-128°C (butyl acetate) Flash point: 27°C (butyl acetate), 13°C (Isopropyl alcohol)

Evaporation rate: N/A Flammability: N/A

Upper/lower flammability or explosive limits: 1.2 Vol%, upper: 7.5% Vol (butyl acetate)

Vapor pressure: 10.7 hPa at 20°C (butyl acetate)

Vapor density: N/A

Relative Density: 0.88 g/cm³ at 20°C (butyl acetate)

Solubility(ies): 5 g/l at 20°C (butyl acetate)
Partition coefficient Octanol/Water: N/A

Auto-ignition temperature: 370°C (butyl acetate)

Decomposition temperature: N/A

Viscosity: 0.7 mPas at 20°C dynamic (butyl acetate) Explosive properties (explosion limits): lower: N/A

Oxidizing properties: N/A

Other information: N/A

Section 10: STABILITY AND REACTIVITY

Stability: Stable under ordinary conditions of use and storage.

Conditions to avoid: Keep away from heat, sparks and open flame.

Materials to avoid: Acids, acids chlorides, acid anhydrides and oxidizing agents.

Hazardous Decomposition products: Under fire emits oxides of cobalt, oxides of nitrogen, amines,

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corrosive and very toxic fumes of hydrogen bromine, very toxic fumes of hydrogen cyanide, oxides of sulfur and other irritating and toxic fumes.

Hazard polymerization: N/A

Section 11: TOXICOLOGICAL INFORMATION

Potential acute health effects

Acute toxicity:

Product/ingredient name	Test	Species	Dose
Isopropyl alcohol	LD50, Oral	Rat	5000 mg/kg
	LC50, Inhalation	Rat	1600 ppm, 480 min.
	LD50, Oral	Mouse	3600 mg/kg
Butyl acetate	LD50, Oral	Rat	10768 mg/kg
	LC50, Inhalation	Rat	390 ppm, 240 min.
	LD50, Oral	Mouse	6000 mg/kg
	LC50, Inhalation	Mouse	6000 mg/m ³ , 120 min.
2-Butanol	LD50, Oral	Rat	2054 mg/kg
	LC50, Inhalation	Rat	800 ppm, 240 min.
	LD50, dermal	Rabbit	>2000 mg/kg

Irritation and corrosivity

Ingestion: N/A

Skin contact: N/A

<u>Inhalation:</u> Vapors may cause drowsiness and dizziness.

Eyes contact: Irritating to eyes.

Sensitization: N/A

CMR Effects:

Carcinogenicity:

Isopropyl alcohol:

ACGIH A4- Not classified as a human carcinogen.

IARC-GROUP 3- Not classifiable as to its carcinogenicity to humans.

Mutagenicity: N/A

Reproductive toxicity: N/A

Other effects:

Over-exposure signs/symptoms:

Skin contact: Repeated exposure may cause skin dryness or cracking.

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Target organs: N/A

Section 12: ECOLOGICAL INFORMATION

Ecotoxicity:

Substance name	Toxicity to fish	Toxicity to crustaceans	Toxicity to algae	Toxicity to other aquatic plants	Other toxicity data (birds, bees, plants etc.)
2-Butanol	Fathead Minnow, LC50 3670 mg/l - 96h	Daphnia, EC50 3750 mg/l - 24h	-	-	-

Mobility: N/A

Persistence and Degradability: N/A

Bioaccumulative potential: N/A

Result of PBT assessment (if CSR is required): N/A

Other adverse effects:

Substances which have an unfavorable influence on the oxygen balance and can be measured using

parameters such as BOD, COD, etc.: N/A

Substances, which contribute to eutrophication: N/A

Remarks: N/A

Section 13: DISPOSAL CONSIDERATIONS

Methods of disposal: Waste must be disposed of in accordance with federal, state and local environmental control regulations.

Hazardous waste: N/A

Section 14: TRANSPORT INFORMATION

International transport regulations

Regulatory Information	UN number	Proper shipping name	Classes	Packing group	Label	Additional information	Marine pollutant
ADR/RID Class	1993	FLAMMABLE LIQUID, N.O.S. (Isopropyl alcohol, Butyl acetate, 2- Butanol)	3	II	***	EAC: 3YE	-
IMDG class	1993	FLAMMABLE LIQUID, N.O.S. (Isopropyl	3	II	3	EmS: F-E, S- E	-

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		alcohol, Butyl acetate, 2- Butanol)					
IATA class	1993	FLAMMABLE LIQUID, N.O.S. (Isopropyl alcohol, Butyl acetate, 2- Butanol)	3	II	3	-	-

National Fire Protection Association Hazard Ratings- NFPA (R):

- 2 Health Hazard Rating
- 3 Flammability Rating
- 0 Instability Rating

Section 15: REGULATORY INFORMATION

Classification and labeling according to EU Directives 67/548/EEC and 1999/45/EC (including amendments) and take into account the intended product use.

Labelling in accordance with EC directives:

Highly flammable Irritant





Risk phrase(s):

R11:Highly Flammable R36: Irritating to the eyes

R52/53: Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment

R66: Repeated exposure may cause skin dryness or cracking

R67: Vapors may cause drowsiness and dizziness

Safety phrase(s):

S2: Keep out of the reach of children S7: Keep container tightly closed

S16: Keep away from sources of ignition - No smoking

S24/25: Avoid contact with skin and eyes

National Paint & Coating Hazardous Materials Identification System – HMIS (R):

- 2 Health Hazard Rating Moderate
- 3 Flammability Rating Serious
- Instability Rating Minimal

Section 16: OTHER INFORMATION

Full text of R-phrases referred to in sections 2 and 3:

R10: Flammable

R11:Highly Flammable

R20/21/22: Harmful by inhalation, in contact with skin and if swallowed

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R32: Contact with acids liberates very toxic gas

R36: Irritating to the eyes

R36/37: rritating to eyes and respiratory system

R50/53: Very Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic

environment

R52/53: Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment

R66: Repeated exposure may cause skin dryness or cracking

R67: Vapors may cause drowsiness and dizziness

Training advice: Before using/handling the product one must read carefully present MSDS.

Recommended restriction: N/A

Key Legend Information:

ACGIH- American Conference of Governmental Industrial Hygienists

OSHA- Occupational Safety and Health Administration

NTP- National Toxicology program

IARC- International Agency for Research on Cancer

ND- Not Determined

N/A- Not available

R-phrases- Risk phrases S-phrases- Safety phrases

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Version no. 1

According to Regulation (EC) No. 1907/2006 (REACH), Annex II and Commission Directive 2001/59/EC.

To the best of our knowledge the information contained herein is accurate. However, neither the above named supplier nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.