# **MICROGRAM**

Laboratory Operations Division
Office Of Science And Drug Abuse Prevention

BUREAU OF NARCOTICS & DANGEROUS DRUGS / U.S. DEPARTMENT OF JUSTICE / WASHINGTON, D.C. 20537

Vol. IV, No. 4

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## Comprehensive Drug Abuse Prevention And Control Act Of 1970

Regulations implementing the new Federal Comprehensive Drug Abuse Prevention and Control Act were published on April 24, 1971 to take effect May 1, 1971. See the Federal Register, Vol. 36, No. 80, Page 7776, a copy of which is enclosed as a supplement to this Microgram.

Under the new regulations, all laboratories conducting analysis of, or o otherwise handling, controlled substances will have to register with BNDD.

Laboratories registered under the old Internal Revenue Law, and having a narcotics tax stamp should already have received a provisional registration and related forms. Some forms, however, are still being mailed.

Other laboratories will have to request the new application form. If you have not received your forms, if you require a new registration, or if you need information, write to:

Registration Branch
Bureau of Narcotics and Dangerous Drugs
Post Office Box 28083
Central Station
Washington, D. C. 20005

If an existing laboratory was not previously registered, and it takes immediate steps to obtain a BNDD registration, normal operations of the laboratory may continue during a grace period. This period is from May 1, 1971 to July 29, 1971, even though the BNDD registration has not yet been approved. No activity involving controlled substances will be permitted after July 29, 1971, however, without a valid BNDD registration.

Ordering controlled substances from a registered distributor during the grace period, but after the laboratory has obtained and mailed their registration forms, may be accomplished. The laboratory must include with the order for controlled substances or on the order forms, the statement,

Analytical methods in **Microgram** do not have official status. Use of funds for printing this publication approved by the Bureau of the Budget, April 8, 1969. **CAUTION:** Use of this publication is restricted to forensic scientists serving law enforcement agencies.

"Federal Registration applied for on (Date)," in the place where the BNDD Registration number would normally be inserted.

We recommend that you read the entire regulations. The following regulations, however, have particular application to analytical laboratories at this time:

- Sec. 301.21 p. 7779: Registration. This section and especially sub-parts (b) (4) and (c) of sec. 301.22 indicate who must register and what activities are included under a registration for an analytical laboratory.
- Sec. 301.75 p. 7785: Security Requirements. General guidelines with regard to protection of controlled substances against theft, pilferage, and diversion have been set forth in this section and 301.71. All controlled substances, including samples received for analysis or suspected controlled substances should be protected in the manner described.
- Sec. 302.01 p. 7785: Labeling. This and the following sections relate to the labeling of substances which may be prepared as samples or standards or otherwise be in need of adequate labeling, even if retained in the laboratory where made. Appropriate marks with an indelible pen on existing labels will suffice.
- Sec. 304.19 p. 7791-2: Inventories. This section specifies quantities which, if less than that amount is on hand, no inventory is required. Samples held for analysis are not included in these quantities. Inventories should not be mailed to the Bureau. If an inventory is required, you should make it soon as possible.
- Sec. 304.27 p. 7793: Record-Keeping. This section allows, by implication, ordinary business records to be used for showing the ordering and receipt of controlled substances so long as the records are readily retrievable for inspection. However, records concerning schedule I and II substances must be kept separate from other correspondence and records. This section also excludes from record-keeping requirements any records relating to samples or evidence submitted for analysis. If any controlled substance is synthesized in the laboratory, records must be kept of the date and the quantity manufactured, and its disposition. Records concerning disposition of controlled substances are not required if the substance has been used up in chemical analysis or in other laboratory use.
- Sec. 305.01 p. 7796: Order Forms. This section and those following it, require that order forms be used whenever schedule I and II substances (except evidence) are being distributed, even between registered laboratories.
- Sec. 308.11 p. 7803-5: Schedules. All controlled substances are listed by their schedules, on these three pages. A more complete list of substances for inventory purposes is available from the Bureau upon request.

Buddha figurines containing drugs were found in a vacant lot by a Washington, D. C. police officer. Feeling that the figurines felt heavier than they should, the alert officer examined them and noted an apparent false bottom. He took them to the BNDD Washington Regional Laboratory.

One Buddha had marihuana in it. The other had plastic containers similar to those shown in the last issue of <u>Microgram</u> (Vol. IV, No. 3, March 1971). These held heroin. In addition, there were ten vials of suspected Maxiton, an amphetamine product made by Delagrange Laboratories, Paris, France. Seven of these vials were found to contain dl-amphetamine. The other three contained heroin.

The Buddhas are about 7 1/2 inches tall, 7 1/2 inches wide and have a rounded base that is approximately 5 1/2 inches by 6 3/4 inches. The figure is seated and has a brown robe, which is plain in back, but has black lines forming rectangles over the arms. The robe has a green border. There is a green skirt covering the legs, exposing bare feet. The left hand rests on the left knee, and is grasping a string of beads. There is a red spot on the forehead, there is a moustache and the chest and abdomen are bare. The figure is poorly made.

The base of the figure is slightly concave, and apparently has a hole through which the drugs are dropped. The hole is plugged with a, thus far unidentified, plaster-like material and plastic. The base is then filled with the plaster, which is then painted with what appears to be white enamel. There are numerous shallow indentations in the base, forming a regular pattern similar to that of a ping pong paddle.

If any of these or similar figurines are found containing drugs, we would appreciate hearing about them.

"Olfactory Incense" is reportedly abused in the Southeastern United States by inhaling the smoke in a closed room. The U.S. Food and Drug Administration inspected the manufacturer's plant in California, and analyzed the product. They found no components with a known abuse potential.

Heroin in plastic containers (Microgram, Vol. IV, No. 3, March 1971) is being encountered by U. S. Customs in a variety of objects. These include hollowed-out bars of soap and candles, submerged in face creams, liquid patent medicines, talcum powder cans and others. The heroin in the containers is in the form of small beads or spheres resembling soap powder If you encounter any of the plastic containers containing heroin or other drugs, we would like to know about it.

Cocaine and procaine in capsules have been encountered by the BNDD New York Regional Laboratory. The capsules were No. 4, hard gelatin, having a green cap and a clear body. The cocaine content was 15.4 milligrams, expressed as the hydrochloride, per capsule. The capsules also contained dextrose, mannitol and starch. This is the first encounter by BNDD of this preparation.

#### SELECTED REFERENCES

Davis, K.H.; Martin, N.H.; Pit, G.C.; Wildes, J.W.; and Wall, M.E.; "The Preparation and Analysis of Enriched and Pure Cannabinoids from Marihuana and Hashish," Lloydia, Vol. 33, No. 4, December, 1970

Carew, David P., 'Microscopic, Microchemical and Thin-Layer Chromatographic Study of Marihuana Grown or Confiscated in Iowa," <u>Journal of Forensic Science</u>, Vol. 16, No. 1, Jan. 1971

Dhahir, H.I.; Jain, N.C.; Crim, D.; Forney, R.B.; 'Methods for the Detection of Ibogaine in Biological Fluids,' <u>Journal of Forensic</u> Science, Vol. 16, No. 1, Jan. 1971

Mule, S.J., "Routine Identification of Drugs of Abuse in Human Urine," Journal of Chromatography, 55 (1971) 255-266

The International Reference Organization In Forensic Medicine And Sciences (INFORM), "The Forensic Sciences and the Drug Problem, Part III, The Stimulant and Depressants," Vol. 3, No. 2, (April, 1971), p. 3-8

New address: American Academy of Forensic Sciences
44 Medical Drive
Salt Lake City, Utah 84113

The incendiary device reported in Microgram, Vol. IV, No. 2 (Feb. 1971), was first discovered and analyzed by the Phoenix, Arizona, Police Department. One suspect, we are told, suffered severe burns because she was unable to get rid of the device fast enough when stopped by officers.

Glossary Of Terms In The Drug Culture accompanies this issue of Microgram. Need for a glossary was expressed at a meeting of forensic scientists and administrators in Chicago, Illinois, 1970. The editor of Microgram was asked to compile submissions from laboratories and law enforcement officers, and the enclosed publication is the result.

In using the glossary, be aware that "street" terms change rapidly with time and meanings vary considerably among geographic areas.

#### SOURCES OF DRUG REFERENCE MATERIALS

## Amphetamines and Barbiturates

U.S.P. Reference Standards 4630 Montgomery Avenue Bethesda, Maryland 20014 NF Reference Standards American Pharmaceutical Association 2215 Constitution Avenue, N. W. Washington, D. C. 20037

#### Other Controlled Substances

Aldrich Chemical Co., Inc. 2371 North 30th Street Milwaukee, Wisconsin 53210

K & K Laboratories 121 Express Street Plainview. New York 11803

Koch-Light Laboratories Colnbrook, Buckinghamshire England

## Narcotics

Merck & Co., Inc. Chemical Division Rahway, New Jersey 07065 K & K Laboratories 121 Express Street Plainview, New York 11803

Mallinckrodt Chemical Works 3600 North Second Street St. Louis, Missouri 63160

# Botanicals

S. B. Penick & Co. 100 Church Street New York, New York 10008

The firms listed above are a few of the many sources from which controlled substances can be obtained. For locating a specific compound, two reference books which could be of assistance are:

- 1. The Drug Topics Red Book
- 2. OPD Chemical Buyers Directory

These books can be ordered from:

Drug Topics Red Book 330 West 34th Street New York, New York 10001 OPD Chemical Buyers Directory Schnell Publishing Co. 100 Church Street New York, New York 10007

#### MANUFACTURERS' ADULTERANT IN ILLICIT HEROIN SEIZURES

Frederick Steinhauer U.S. Customs Laboratory San Diego, California

Acetylprocaine as an adulterant in seizures of Mexican heroin is appearing in an increasing percentage of seizures analyzed by the U. S. Customs Laboratory in San Diego. This compound is not available commercially, and is most likely the result of premature addition of procaine to a heroin batch at the manufacturer's level while some excess acetylating agent is still present. The presence of this compound could be very useful in comparing seizures, relating cut samples to original batches, conspiracy cases, etc.

Acetylprocaine can be prepared in the laboratory by using the method described in <u>Organic Experiments</u>, 2nd edition, Louis F. Fieser, page 183, using method (b) for the preparation of acetanilide using 14.6 grams of procaine hydrochloride in place of aniline.

Relative retention times on gas chromatography are 0.90 compared to codeine on a 5% OV-1 Chromosorb 80/100, 6' x 1/4" stainless steel column at  $225^{\circ}$ C and 0.88 compared to codeine on a 2% OV-17 on Gas-Chrom Q 80/100, 6' x 1/4" glas silated column at  $255^{\circ}$ C.

#### SUPER GRASS

James M. White
Orange County Sheriff's Department
Criminalistics Laboratory
P. O. Box 449
Santa Ana, California

In searching a house involved in LSD distribution, police found an Erlenmeyer flask containing 40 ml (approximately 40 gms) of a brown, viscous fluid. The occupants alleged the fluid to be "super grass" which would sell for about \$300.

Microscopic appearance: the fluid was completely free of botanical material. Occasional salt crystals were suspended in the fluid.

#### Identification:

By thin layer chromatography, the fluid was found to have a cannabinol content identical to that of marihuana.

System 1: Silica gel, hexane:diethyl ether 4:1

System 2: Silica gel, benzene

Visualization: Duquenois spray, followed by exposure to HCl fumes

By gas chromatography, traces of ethanol were found in the fluid.

# Quantitation:

Spectrophotometric evaluation of quantitative Duquenois-Levine reactions on the fluid, along with recently seized "hashish" samples showed the fluid to be 1 1/2 - 2 times "stronger" by weight with respect to Duquenois reactive components.