ESTABLISHED IN 1970

NARTEC, Inc.



NM-3
DRUG IDENTIFICATION KIT

PRODUCT INFORMATION AND OPERATING INSTRUCTIONS



READ THIS MANUAL CAREFULLY BEFORE USING NARTEC PRODUCTIII



Welcome!

Welcome to our instructional manual for the use of NARTEC's NM-3 Detection Kit. We believe the use of our quick and easy-to-use products will become a valuable addition to the officer's arsenal of detective materials.

Your ability to use the NARTEC products is of utmost importance to us and we welcome your input to improve the manual to make it more officer-friendly.

If you have any questions in the future, we have over 40 years of experience in drug identification and will assist you wherever we can.

Sincerely,

Jeffrey L. Ware President NARTEC, Inc.

REAGENT CHEMICALS IN THE NARTEC NM-3 KIT

Note that many of the chemicals in the test reagents are present in small quantities in a primary substance, such as sulfuric acid, methanol, ethanol or water. Therefore, your concern should be for those primary substances, especially the sulfuric acid. All of the reagents are in plastic bottles, except for the chloroform, and will not break if dropped. The quantity of reagents used for testing are in one to five drop sizes (one drop = 0.05 ml), with only small amounts of reagents exposed to the user. Proper care should be used when testing with the reagents containing the corrosives, such as sulfuric acid and sodium hydroxide. Read the instruction manual.

If you have any questions call: 417-587-3340 or Email: aware@nartec.com

TEST FOR	REFERENCE	INGREDIENTS
AMPHETAMINE & OPIATES	MARQUIS	A - 70% SULFIRIC ACID (V/V), FORMALDEHYDE (3.75% V/V) B - CONCENTRATED SULFURIC ACID
METHAMPHETAMINE	METHADRINE	A - WATER, ACETALDEHYDE (10% V/V), SODIUM NITROPRUSIDE (1% V/V) B - WATER, SODIUM CARBONATE (2%)
STP/OPIATES	MECKES	A - 60% SULFURIC ACID (V/V), SELENOUS ACID (0.5% W/V) B - CONCENTRATED SULFURIC ACID
EPHEDRINE	EPHEDRINE	A - WATER, ACETIC ACID (1% V/V), COPPER SULFATE (1% W/V) B - WATER, SODIUM HYDROXIDE (2.1% W/V)
BARBITUATES	DILLE-KOPPANYI	A - METHANOL, ACETIC ACID (1.8% V/V), COBALT ACETATE (0.1% W/V) B - METHANOL, ISOPROPYLAMINE (5% V/V)
MARIJUANA/HASHISH	DUQUENOIS	A - ETHYL ALCOHOL, VANILLA (2% W/V), ACETALDEHYDE (1.25% V/V) B - 60% SULFURIC ACID (V/V)
COCAINE (COLOR)	COBALT THIOCYANATE	AWATER, ACETIC ACID (1-% V/V) COBALT THIOCYANATE (1.6% W/V)
COCAINE (ODOR)	WINTERGREEN	METHANOL, SODIUM HYDROXIDE (5% W/V)
LSD	VAN URK MODIFIED	A - ETHANOL, DIMETHYLAMINOBENZALDEHYDE (4% W/V) B - 70% SULFURIC ACID (V/V)
CHLOROFORM	CHLOROFORM	CHLOROFORM

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INTRODUCTION

NARTEC DRUGS OF ABUSE KIT

The *NARTEC* drugs of abuse test kit was developed to give you quick, simple, on-the-spot tests for the detection of illegal narcotics and other controlled substances. The tests are based on color reactions that occurs when the test reagents are added to chemical substances such as amphetamines, opiates, cocaine and marihuana. For cocaine, there is a second unique test that produces a minty odor when that reagent is added to cocaine. Positive test results are to be considered only as presumptive evidence that the specific drug or type of drug is present. Final confirming analysis must be conducted in a laboratory by a qualified person if used as evidence in court.

PRECAUTIONS

CAUTION: Use the NARTEC kit with care!

Reagent bottles, labeled "WARNING: ACID" contain sulfuric acid and must be handled carefully. If you should accidently get a drop of the acid on you, immediately add the acid neutralizer (sodium bicarbonate solution) to the affected area and, as soon as possible, wash with soap and water. If the acid should splash in the eye, flush the eye with copious amounts of water and quickly contact a physician. If the acid is ingested, do not induce vomiting.

Administer milk, egg white, or one heaping teaspoon of egg albumin in cold water and immediately call for medical assistance (poison control, physician, etc.)

Conduct the tests in a well-ventilated area. The barbiturates reagent and the odor-producing reagent for cocaine (green label) contain methanol. Avoid prolonged inhalation of the fumes from this reagent. May be fatal or cause blindness if swallowed. If ingested, induce vomiting and give sodium bicarbonate (baking soda), 2 teaspoons in a glass of water.

Chloroform, used with the marihuana test, may be fatal if swallowed. Use only with adequate ventilation. Avoid breathing vapors. If ingested, if conscious, give a half glass of mineral oil, then a tablespoon of powdered mustard in a glass of warm water and repeat until vomit fluid is clear. Call for medical assistance.

STORE THE KIT UNDER SECURE CONDITIONS!

TESTING PROCEDURE

Use clean dry test plates. Place a small quantity of the suspect material (size of O) in the cups of the test plates and add the reagents as directed. If testing tablets, scrape a portion of the tablet into the cup, as a powder. If testing time-release pellets in a capsule, crush the pellets to produce a powder. If there is only one tablet or a small amount of powder, use a portion for testing and save the remainder for referral to a qualified testing laboratory. If you have information or knowledge of the probable drug identity, test for that drug first. IMPORTANT: READ THE COLOR REACTION WITHIN ONE MINUTE!

After completion of the tests, wash the test plates with soap and water. Be careful when cleaning the plates. If you are cleaning the plate under a stream of water, tilt the plate away from you so that the test reagent will not splash on you.

CAUTION: Take extreme care in handling samples. Do not taste drugs. Wash hands thoroughly after handling samples. Do not place hands in or around the area of the mouth prior to washing.

The test reaction colors present in this manual are not to be considered as the only colors produced by the tested substances. They are offered to the officer as a general guide for the possible identity of the tested substance. Color variations can occur due to the purity of the substances.

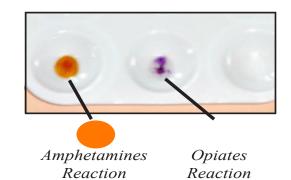
AMPHETAMINES AND OPIATES

The AMPHETAMINE-OPIATE test is based on the classic <u>Marquis</u> color reaction.

Add one (1) drop of reagent A to a small portion of the suspect

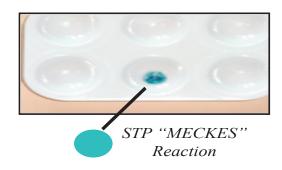
An orange color which progresses to a reddish-brown color is a positive test for the amphetamines. Read the color within one minute. Disregard any brown color that may form after the one minute period.

material. Add three (3) drops of reagent B.



A purple color development is positive for the opiate narcotics: morphine, heroin, codeine, etc. A few other drugs can give a purple-black color: antihistamines, antibiotics, propoxyphene and some dyes in tablets.

ALTERNATE TEST FOR OPIATES: To a separate sample of suspect material, add one (1) drop of STP/OPIATE reagent A and three (3) drops of STP/OPIATE reagent B.



The STP/OPIATES test is based on the classic Mecke's reagent.

Positive results are:

Heroin	Green
Codeine	Blue-Green
Morphine	Blue to Blue-Green
Opium	Yellow to Green

The common drugs which give a purple to purple-black color with AMPHETAMINE/OPIATE reagents can be ruled out as an opiate by conducting the STP test on them and noting that they do not give the green colors.

Antihistamine:	Amphetamine test	purple
	STP test	purple
Antibiotic:	Amphetamine testSTP test	
Propoxyphene:	Amphetamine test	

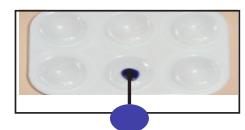
METHAMPHETAMINE (Methadrine)

The test for methamphetamine is based on a color developent from the sodium nitroprusside reagent.

If the AMPHETAMINE test was positive, test a separate sample of the suspect material for methamphetamine, also known as "speed," "meth," "crank," etc. Add one (1) drop of reagent A. Add one (1) drop of reagent B. An immediate deep blue color (developing within

1-4 seconds) is a positive test for the drug, methamphetamine.

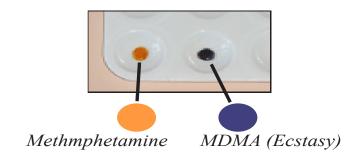
The drug, 3,4,methylenedioxymethyl amphetamine which is also known as MDMA, Ecstasy, Adam, XTC and MDM will produce the same blue color as methamphetamine.



Methamphetamine/ MDMA Reaction

MDMA can be differentiated from methamphetamine by running the Amphetamine/Opiate (Marquis) test on a separate portion of the suspect material. Methamphetamine will turn orange, while MDMA or ectasy will turn an inky-black color.

Differentiating between Methamphetamine from MDMA (Ecstasy) by using the Amphetamine/Opiate (Marquis) reagent



NOTE: The METHAMPHETAMINE A reagent may gradually become blue colored, during a prolonged storage time at an elevated temperature. A positive test result will still be obtained, but the color formation may be more difficult to interpret. If this should occur, you can run a blank test (add one (1) drop of METHAMPHETAMINE B to one (1) drop of METHAMPHETAMINE A, without any suspect powder) in a separate plate depression, along with your test on the suspect material. Compare the colors formed. A more intense blue color will form with methamphetamine than with the blank. Replace the reagent with a fresh reagent, obtainable from NARTEC.

The METHAMPHETAMINE test may be used along with the AMPHETAMINE test for additional drug identifications.

COLOR REACTION TESTING PROCEDURE

DRUG	AMPHETAMINE (Marquis reagent)	METHAMPHETAMINE (Sodium nitroprusside)
AMPH	Orange-brown	Negative
METH	Orange-brown	Blue (Positive)
MDA	Inky Black	Negative
MDMA	Inky Black	Blue (Positive)
MMDA	Inky Black	Negative
*Propyl hexadrine	Negative	Blue (Positive)

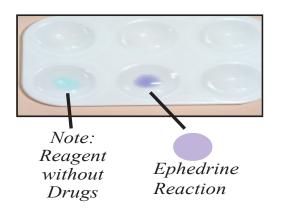
^{*}Propyl hexadrine is found in certain inhalers. It will rarely be encountered.



EPHEDRINE/PSEUDOEPHEDRINE

The test for ephedrine/pseudoephedrine is based on the color development from the <u>Chen's</u> reagent.

Add two (2) drops of EPHEDRINE A to the suspect material. Add two (2) drops of EPHEDRINE B. An immediate purple color is a positive



test for ephedrine. The EPHEDRINE A reagent is a light blue color. Disregard this color.

Ephedrine is a drug that is sometimes alleged to be an "amphetamine" or "speed." It is usually found in small white double-scored tablets, crushed tablets

or in powders. When the AMPHETAMINE test reagent is added to ephedrine, the reagent remain nearly colorless.

BARBITURATES

The test for barbiturates is based on the color development from the <u>Dille-Koppanyi reagent.</u>

Barbiturates Reaction

Add two (2) drops of the BARBITURATE A reagent to the suspect powder. Add

two (2) drops of BARBITURATE B reagent. A reddish-purple color is positive for a barbiturate.

MARIHUANA/HASHISH

The Marihuana/Hashish test is based upon the <u>Duquenois-Levine</u> test for marihuana resins.

The MARIHUANA-HASHISH test can be conducted using a glass test tube, furnished with the kit, or in the depression of the test plate.



- Step 1 Place suspect plant material in the depression in the test plate. Add five (5) drops of MARIHUANA A and wait 15 seconds.
- Step 2 Add five (5) drops of MARIHUANA B. A violet color will form if the suspect material is marihuana or hashish.

Step 3 Add ten (10) drops of chloroform to the purple mixture, using the plastic dropper in the kit. If a test plate was used, gently

rock the plate to mix the liquids. The chloroform layer, usually around the edge of the mixture, will become purple-colored if marihuana is present. If a test tube was used, the chloroform will settle to the bottom. While holding the tube upright, carefully shake it sideways to mix. The layer



Aarinuana Test in a Test Tube

of chloroform on the bottom will become purple-colored if the plant material is marihuana.

The test tubes are reusable. Wash them carefully after use as they contain a small amount of acid.

NOTE: Dried tea leaves may produce a purple coloration with the MARIHUANA test teagents. In most cases, tea leaves have an appearance different than marihuana.

When the Step 3 is conducted, false positive tests from tea or coffee will be eliminated. The Step 3 may be omitted if it is obvious that the suspect material is not coffee or tea.

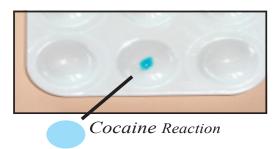
COCAINE/"CRACK"

The color test for cocaine is based on the <u>cobalt thiocyanate</u> test. The odor test for cocaine is based on its reaction with sodium methoxide.

Two types of tests are used in the NARTEC drug testing kit: a color test and an odor test. When both tests are used, false positive tests for cocaine salts and for "crack," a base form of cocaine, are practically eliminated. If a chunky substance is suspected to be "crack," scrape a small amount off for testing.

Step 1 Add one (1) drop of the pink test reagent, cobalt thiocyanate, (blue label) to the powder in the plate. An <u>immediate</u> turquoise blue color (1 to 2 seconds) is a positive test for cocaine. If the blue color is slower in developing, the powder

is probably not cocaine. Other "caines" which may give a blue color are: lidocaine, tetracaine and procaine. Other drugs which produce blue colors are: heroin, phencyclidine, propoxy- phene,



phencyclidine, propoxy- phene, meperidine, methadon, diphenhydramine, methapyrilene and amitriptyline.

NOTE: The pink-colored COCAINE reagent will turn blue in the test plate as it drys. This will occur after many minutes and it should not be confused with the immediate blue positive color that develops with cocaine.

Step 2 In a different test plate containing the suspect cocaine powder, add one (1) drop of the clear liquid (green label). Wait 2 minutes for the solvent to evaporate. Don't blow on the powder to hasten evaporation. Carefully lift the plate to the nose and note if a minty odor is present. A wintergreen type odor is a positive test for cocaine and cocaine base ("crack").

The reason for using two different test plates is that the pink color reagent contains a weak solution of acetic acid. The vinegar odor from the acetic acid could mask the wintergreen odor, if both tests are conducted on the same plate near each other.

An obscure drug, piperocaine, will also produce the same minty odor. The vast majority of drugs and excepiens (fillers and cutting agents) likely to be encountered, will not produce the wintergreen odor.

CAUTION: Water will interfer with the tests so reagents and suspect material should be kept dry. The tests should be conducted in an area free from drafts.

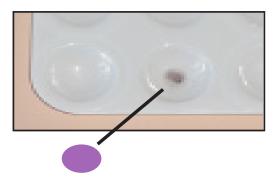
NOTE: A white crust (sodium carbonate) may form on the tip of the COCAINE odor test reagent bottle and obstruct the small opening. If this happens, use a pin or needle to unplug the tip orifice.

LSD

The test for the hallucinogen, LSD, is based on the color development from the <u>Sanchez</u> reagent.

Add one (1) drop of LSD A to the suspect material. Add one (1)

drop of LSD B. Observe the solution carefully for a color change. A lavender or violet color indicates the presumptive presence of LSD, psilocybin, DMT or DET. Psilocybin, found in the psilocybin mushroom, DMT and DET are also hallucinogenic drugs, along with LSD or lysergic acid diethylamide.



LSD on Blotter Paper Reaction

NOTE: Most ergot alkaloids (ergotamine, ergonovine, etc.) will slowly turn a purple color in the presence of the LSD test reagents. However, these will rarely be encountered. Purple dyes in powders or pills may interfere.

Ergonovine, etc. will slowly turn a purple color in the presence of the LSD test reagents. However, these will rarely be encountered. Purple dyes in powders or pills may interfere.

The NARTEC kit contains strong acids in some of its test reagents. These acids will slowly darken over a period of time. Positive tests will be obtained even after some darkening has occurred. Since heat will accelerate the darkening process, it is recommended that the kit should not be stored in a hot place for LONG periods of times. Example: the kit should not be stored in an automobile trunk in the summer. A cool storage place will prolong the life of your NARTEC kit.

To replenish the neutralizer solution, dissolve baking soda (sodium bicarbonate) in water until no more will dissolve. This will duplicate the original neutralizer solution. The neutralizer bottle top unscrews so that the bottle can be refilled.

When possible, obtain known drug controls and conduct periodic tests on them. The purpose is two-fold: 1) to check the potency of the test reagents, and 2) to remain acquainted with the color reactions.

COLOR REACTIONS

The colors produced by both the Amphetamine test reagents and the STP test reagents can be useful as a cross-reference in the identification of some street drugs and non-controlled drugs.

DRUG AMPHETAMINE STP REAGENT REAGENT

Amphetamine orange - brown colorless or no change
Methamphetamine orange - brown colorless or no change
Mescalineorange - brown
DOM (STP)yellowyellow - greenish-yellow
TMA olive-green - brown
MDAgreen - blue - purple
DMT and DET yellow - brownbrown - greenish-black
Bufoteninebrown - greenish-black
Psilocybinyellow - greenish-yellow greenish-yellow -
green - brownish-green
Psilocin green - black green - greenish-black
Ibogaine blue - purple - brown - orangebrown - purple
Benactyzineorange - blueorange - olive - green
Methylphenidatec-yellow - brownish-yellow colorless or no change
Methypryloncolorless or no change colorless or no change
Phencyclidinec - faint pinkcolorless or no change
Phenmetrazine c - yellowish-brownlight brown
Propoxyphenepurple - blacklight brown
Aspirin c - rose-red

c represents colorless or no change in color

TIPS AND HINTS FOR USING THE NM-3 KIT

The NARTEC NM-3 kit contains strong acids in the Amphetamine A & B reagents, the STP A & B reagents, the Marihuana B reagent and the LSD B reagent. Use care when testing with these reagents. These acids will slowly darken over a period of time in the plastic bottles. Positive test results will be obtained, even after some darkening has occurred. When the reagents become so dark that you cannot see the color changes, replace with fresh reagents.

In NARTEC's experience, we have found that the average shelf life of these reagents, when stored at room temperature, are about 12 months. Heat will accelerate the darkening, likewise cool temperatures will prolong the shelf life. Although not necessary, we have found that storage in a refrigerator, when not in use, can extend the shelf life of the reagents by several years. Since heat will accelerate the darkening process, it is recommended that the kit should not be stored in a hot place for LONG periods of time- for example, it should not be stored in an automobile trunk in the summer.

The liquid reagent in the Methamphetamine A bottle will gradually darken to a blue color over a period of time. This is the effect of heat. The reagent can be used until the blue color of the liquid becomes darker than the deep blue color from a positive methamphetamine test. The reagent should be replaced at that time. Run a blank test (1 drop of A and 1 drop of B) in the test plate, alongside a known meth sample test and compare the colors. If you can see a darker blue in the known meth test, the reagent is still OK. Storage in a cool place when not in use, will extend the shelf life of the meth reagent A. A refrigerator storage will add years of use.

When possible, obtain known drugs and conduct periodic tests on them with the NM-3 kit. The purpose is two-fold: 1) to check the potency of the test reagents and 2) to remain acquainted with the color reactions.

To replenish the neutralizer solution, dissolve baking soda (sodium bicarbonate) in water until no more will dissolve. This will duplicate the original neutralizer solution. Unscrew the cap on the bottle and add the new solution into the bottle.

The drop-dispensing tips on the reagent bottles may cause the reagents to dribble down and onto the labels. If this should happen, carefully dry the tip by using a wad of paper towel on it. Use a large wad so that you don't get the reagent on you. The reagent bottle labels and the instructions in the lid are water resistant and may be cleaned with a solution of baking soda and water. The foam plastic insert in the kit can be cleaned of any acid dribble by removing all the bottles, washing with baking soda and water and then allowed to air dry.

When cleaning the test plate with a stream of water, tilt the plate so that the water will not splash the used reagent on you.

Use a gentle stream of water.

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Limited Warranty

NARTEC'S drug testing products (the "PRODUCTS") are prepared under controlled conditions and are warranted to be free of defects and contamination at the time they are prepared and packaged for delivery and thus merchantable and fit for the specific purpose of testing compounds for the presence of narcotics.

NARTEC's sole obligation and your sole remedy, under this warranty is limited to, at NARTEC's sole discretion, replacement or refund of the defective Product provided NARTEC is notified of such defect within 30 days of invoice date.

Except for the warranty expressed herein, it is agreed and understood that (i) there are no express or implied warranties that extend beyond the face hereof and, without limitation of the foregoing, no guarantee or warranty of test results can be expressed or implied, and (ii) IN NO EVENT SHALL NARTEC OR ITS OFFICERS, DIRECTORS, EMPLOYEES, AND/OR OTHER REPRESENTATIVES BE LIABLE TO YOU, ANY SUBSEQUENT PURCHASER OR ANY OTHER THIRD PARTY FOR ANY DIRECT, INDIRECT, SPECIAL, INCIDENTAL, PUNITIVE OR CONSEQUENTIAL DAMAGES, WETHER OR NOT FORESEEABLE, EVEN IF NARTEC HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES, INCLUDING BUT NOT LIMITED TO PERSONAL INJURY, PROPERTY DAMAGE, ANY LOSS OF REVENUE, LOSS OF CUSTOMERS, LOSS OF GOODWILL, OR LOSS OF PROFITS, ARISING OUT OF OR IN RELATION TO THE SALE OF THESE PRODUCTS OR THESE TERMS, WETHER ARISING UNDER CONTRACT, TORT OR ANY OTHER LEGAL OR EQUITABLE THEORY. IN NO EVENT SHALL NARTEC'S TOTAL, CUMULATIVE LIABILITY HEREUNDER EXCEED THE PURCHASE PRICE (EXCLUDING SHIPPING, TAXES, AND DUTIES) FOR THE SPECIFIC PRODUCTS GIVING RISE TO THE CLAIMS WILL NOT ENLARGE THIS LIMIT. THIS LIMITATION OF LIABILITY SHALL APPLY NOTWITH-STANDING ANY FAILURE OF ESSENTIAL PURPOSE OF ANY EXCLUSIVE REMEMDY HEREIN.

Replacement for reagents and equipment may be purchased from:

NARTEC, Inc.

www.nartec.com