

Narcotics
Analysis
Reagent
K[®]it



TECHNICAL INFORMATION

SIRCHIE

PRODUCTS • VEHICLES • TRAINING

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Narcotics Analysis Reagent Kit[®]

WARNING! Chemicals contained in this kit, as well as those formed by the reaction with the suspect materials, can be hazardous to the user. The operator should wear safety glasses, gloves, and a protective clothing when using this kit.

Introduction

Identification of narcotics or other controlled substances is a difficult task. There are many potential methods and formulas, which all require knowledge of chemistry and lab techniques. For quick presumptive testing, color spot tests for identification are typically used, and can be completed outside of a lab. SIRCHIE takes the guess work out of identification with NARK.

Each NARK test is self-contained. There is no need for measurement of chemicals or special equipment. Secured in each tube are crushable glass ampoules with the complete chemistry for each test. Add the amount of suspect material and perform the test according to the instructions.

The standard kit, NAR100, contains 8 commonly used controlled substance tests. (Reagents 1-8). These include testing for cocaine, heroin, amphetamine, and marijuana, to name a few.

The kit also contains a dropper bottle of acid neutralizer (sodium carbonate solution), a box of poly bags for safe disposal, and a high impact polyethylene case.

In addition to this kit, there are 9 additional tests for specific substances, such as methamphetamine, ephedrine, opiates, and PCP. Each individual test box contains ten individual testing tubettes. Any of these tests, including the tests in the NAR100 kit, can be ordered as separate items.

The reagents and the narcotics, abused drugs, and/or hallucinogens for which they can be used to make tentative identification are:

TEST	REAGENT	SUBSTANCE PRESUMPTIVELY IDENTIFIED
No. 1	Mayer's Reagent	Alkaloids, Amphetamines
No. 2	Marquis Reagent	Amphetamines, Heroin, MDMA (Ecstasy)
No. 3	Nitric Acid Reagent	Heroin, Morphine
No. 4	Cobalt-Thiocyanate Reagent	Cocaine
No. 5	Dille-Koppanyi Reagent	Barbiturates
No. 6	Mandelin Reagent	Amphetamines
No. 7	Ehrlich's Reagent	Hallucinogens
No. 8	Duquenois-Levine Reagent	Marijuana, THC
No. 9	KN (Fast Blue B Salt) Reagent	Marijuana, THC
No. 3	Cobalt Thiocyanate Reagent	Cocaine HCl, Freebase, Crack
No. 4	Valium Reagent	Valium, Rohypnol, Ketamine
No. 5	Methamphetamine Reagent	Methamphetamine, MDMA (Ecstasy)
No. 6	Mecke's Modified Reagent	Heroin (White, Black, Brown)
No. 8	Talwin Reagent	Talwin
No. 9	Ephedrine Reagent	Ephedrine
No. 22	Special Opiates	Heroin, Oxycodone
No. 29	PCP Reagent	PCP, Methaqualone

SIRCHIE emphasizes that these reagents are to be used for presumptive purposes only, and should not be used for evidential purposes unless the results are verified by a qualified forensic scientist in a properly equipped crime laboratory.

Before conducting any of the tests, users should thoroughly read the instructions provided. Experience has shown that even in the hands of the most proficient user, due to the variety of unknowns confronted, the reagents can give false positives as well as false negatives.

Reagent units that are damaged or more than 18 months from the date of manufacture should be discarded and replaced with fresh materials.

Warranty Disclaimer

Because we cannot anticipate or control the many different conditions under which this information and our products may be used, we do not guarantee the applicability or the accuracy of this information or the suitability of our prod-

ucts in any given situation. Users of our products should make their own test to determine the suitability of each such product for their particular purposes. The products discussed are sold without warranty, either express or implied, and buyer assumes all responsibility for loss or damage arising from the handling and use of our products, whether done in accordance with directions or not.

The Testing Unit

The testing tubette consists of a flexible plastic tube in which crushable glass ampoules containing the correct amount of the designated reagent have been secured.

Tubettes containing Reagents No. 1, 2, 3 and 6 have one ampoule secured to the bottom of the plastic tube.


Tubettes containing Reagents No. 4, 5, 7, 8, 9, 13, 14, 15, 16, 18, 19, 22 and 29 have two ampoules, one secured to the bottom of the plastic tube and another secured in the removable cap.

Caps containing ampoules should be removed and replaced carefully to insure that the ampoule is not broken.



Testing Procedure

1. Select a testing tubette. Unknown substances should first be subjected to the general screening test (e.g., Mayer's Reagent or Marquis Reagent).
2. Remove cap carefully.
3. Place a small quantity (refer to individual instructions) in the tubette.

RECOMMENDED AMOUNTS FOR TESTING : *Other than the amounts described for brown/black tar heroin and plant material, all powder should fit within this particular sized area shown.*

4. Carefully replace the cap.
5. Tap firmly on the side of the plastic tubette to ensure that the material falls to the bottom of the tubette.
6. Break the ampoule by squeezing the center of the ampoule with the tips of the thumb and forefinger.

Do not break the ampoule by bending the tubette; this may cause the tubette to crack. **Note** that in tubettes containing two ampoules, the ampoule secured in the **bottom** of the tubette is **always broken first**.



Break the ampoule between your thumb and forefinger.

7. Agitate the tubette to ensure that the reagent reacts with the suspect material.
8. Observe color development for approximately one minute. Compare color with those on color chart.

WARNING! Many of the reagents included in this kit contain acids which can cause burns. Avoid contact with eyes and skin.

External Antidote: Immediately flood surface with water. Neutralize with sodium carbonate (baking soda).

Internal Antidote: In case of ingestion, do not induce vomiting. Dilute by drinking water or milk and consult a physician.

Do not store used testing tubette. Deposit a few drops of acid neutralizer in the tubette when the test is completed and place in one of the poly bags provided with the kit for disposal in a department authorized location.

MSDS Sheets: For complete access to the MSDS sheets for NARK® products, please visit our website: www.sirchie.com.

Individual Test Descriptions

NO. 1: MAYER'S REAGENT

General Narcotic Alkaloids Test (1 ampoule)

Purpose: This reagent is used as a presumptive test for the presence of narcotic alkaloids.

Procedure:

1. Remove cap.
2. Deposit suspect material in tube.
3. Replace cap and tap firmly to ensure material falls to bottom of tube.
4. Break ampoule. Agitate.

Color Reaction: The formation of a creamy-white precipitate is indicative of the presence of one of the narcotic alkaloids or the amphetamines. The substance should now be tested using No. 2 Marquis Reagent, a test for opium alkaloids. If no reaction is observed, the substance should be subjected to test No. 5 Dille-Koppanyi, a test for barbiturates.

Contents: A solution of mercuric chloride and potassium iodide in deionized water.

WARNING! Mercuric chloride is a poison. Wear gloves and safety glasses when performing this test. **FIRST AID:** Induce vomiting immediately (salt water or IP-ECAC) and seek medical attention!

NO. 2: MARQUIS REAGENT

Opium Alkaloids Test (1 ampoule)

Purpose: This reagent is used as a presumptive test for the presence of the opium alkaloids.

Procedure:

1. Remove cap.
2. Deposit suspect material in tube.
3. Replace cap and tap firmly to ensure material falls to bottom of tube.
4. Break ampoule. Agitate.

Color Reaction:

1. Dark Red-Purple is indicative of the Opium Alkaloids. *Test next with No. 16 Mecke's Reagent Modified.*
2. Orange to Red-Brown within 12 seconds may be indicative of the amphetamines. *Test next with No. 15 Methamphetamine Reagent.*
3. Black indicates the possible presence of MDMA (Ecstasy). *Test next with No. 15 Methamphetamine/MDMA Reagent.*

Contents: Concentrated sulfuric acid with formaldehyde.

NO. 3: NITRIC ACID REAGENT

Heroin/Morphine Test (1 ampoule)

Purpose: This reagent is used as a presumptive test differentiate between Heroin and Morphine. For confirmation of Heroin, use No. 16 Mecke's Reagent Modified.

Procedure:

1. Remove cap.
2. Deposit suspect material in tube.
3. Replace cap and tap firmly to ensure material falls to bottom of tube.
4. Break ampoule. Agitate.

Color Reaction:

1. Pale Yellow is indicative of heroin. Upon standing the color turns Light-Green.
2. Orange changing to Orange-Yellow, fading rapidly to Yellow is indicative of morphine.

Contents: Concentrated nitric acid.

NO. 4: COBALT THIOCYANATE REAGENT

Cocaine/Procaine/Tetracaine/Methadone Test (2 ampoules)

Purpose: This reagent is used as a presumptive test for the presence of cocaine, procaine, tetracaine and methadone.

Procedure:

1. Remove cap.
2. Deposit suspect material in tube.
3. Replace cap and tap firmly to ensure material falls to bottom of tube.

4. Break ampoule in bottom of tube. Agitate. OBSERVE BLUE COLOR REACTION!
5. Break ampoule in cap. Agitate.

Color Reaction:

1. All above listed narcotics will produce a brilliant blue flaky precipitate in the first solution.
2. Blue flakes remaining undissolved in second solution is indicative of cocaine.
3. Blue flakes partially dissolved in second solution is indicative of methadone.
4. Blue flakes completely dissolved in second solution is indicative of procaine or tetracaine.

Contents: (bottom ampoule) Cobalt thiocyanate,
(cap ampoule) Stannous chloride.

NO. 5: DILLE-KOPPANYI REAGENT

Barbiturates Test (2 ampoules)

Purpose: This reagent is used as a presumptive test for the presence of barbiturates.

Procedure:

1. Remove cap.
2. Deposit suspect material in tube.
3. Replace cap and tap firmly to ensure material falls to bottom of tube.
4. Break ampoule in bottom of tube. Agitate.
5. Break ampoule in cap. Agitate.

Color Reaction: Purple Violet is indicative of barbiturates.

Contents: (bottom ampoule) Cobalt acetate in methanol,
(cap ampoule) a solution of 5% isopropylamine.

NO. 6: MANDELIN REAGENT

Amphetamines Test (1 ampoule)

Purpose: This reagent is used as a presumptive test for the presence of amphetamines.

Procedure:

1. Remove cap.
2. Deposit suspect material in tube.
3. Replace cap and tap firmly to ensure material falls to bottom of tube.
4. Break ampoule. Agitate.

Color Reaction: Yellow-Green is indicative of amphetamines, i.e., benzedrine, dexedrine.

Contents: A solution of ammonium vanadate in concentrated sulfuric acid.

NO. 7: EHRlich'S REAGENT (MODIFIED)

Hallucinogens Test (2 ampoules)

Purpose: This reagent is used as a presumptive test for the presence of hallucinogens. Since the active ingredient in hallucinogens may be present in very small quantities, a greater amount of the suspect material may be necessary to produce an observable color.

Procedure:

1. Remove cap.
2. Deposit suspect material in tube.
3. Replace cap and tap firmly to ensure material falls to bottom of tube.
4. Break ampoule in bottom of tube. Agitate.
5. Break ampoule in cap. Agitate.

Color Reaction: A slowly developing (two to three minutes) Light Violet to Dark Violet is indicative of LSD.

Contents: (bottom ampoule) A solution of p-dimethylamino benzaldehyde.
(cap ampoule) Concentrated hydrochloric acid.

NO. 8: DUQUENOIS REAGENT

Marijuana/Hashish/THC Test (2 ampoules)

Purpose: This reagent is used as a presumptive test for the presence of marijuana, hashish and THC.

Procedure:

1. Remove cap.
2. Deposit suspect material in tube.
3. Replace cap and tap firmly to ensure material falls to bottom of tube.
4. Break ampoule in bottom of tube. Agitate.
5. Break ampoule in cap. Agitate.

Color Reaction: Light Blue to Purple is indicative of marijuana or its active ingredient. Fresh materials may give up the blue color almost immediately.

Contents: (bottom ampoule) Vanillin solution in ethanol,
(cap ampoule) Concentrated hydrochloric acid.

NO. 9: KN (FAST BLUE B SALT) REAGENT

Marijuana/Hashish/THC Test (2 ampoules)

Purpose: This reagent is used as a presumptive test for the presence of marijuana, hashish and THC.

Procedure:

1. Remove cap.
2. Deposit suspect material in tube.
3. Replace cap and tap firmly to ensure material falls to bottom of tube.
4. Break ampoule in bottom of tube. Agitate.
5. Break ampoule in cap. Agitate VIGOROUSLY.

Color Reaction: Orange red to dark red is indicative of marijuana, hashish or THC.

Contents: (bottom ampoule) A solution of naphthanil diazo blue B in chloroform,
(cap ampoule) A solution of aqueous sodium hydroxide.

NO. 13: COBALT THIOCYANATE REAGENT (MODIFIED)

Cocaine HCl/Cocaine Free-Base/"Crack" Test (2 ampoules)

Purpose: This reagent is used as a presumptive test for the presence of cocaine HCl, cocaine free-base and "crack." Crack is a mixture of cocaine HCl and bicarbonate of soda.

Procedure:

1. Remove cap.
2. Deposit suspect material in tube.
3. Replace cap and tap firmly to ensure material falls to bottom of tube.
4. Break ampoule in bottom of tube. Agitate. OBSERVE BLUE COLOR REACTION!
5. Break ampoule in cap. Agitate.

Color Reaction:

1. All above listed narcotics will produce a brilliant blue color. Cocaine HCl and cocaine free-base will produce a flaky blue precipitate. The crack crystal will turn blue and blue flakes may be noted in the solution.
2. Blue flakes remaining undissolved in second solution is indicative of cocaine HCl and cocaine free-base. The second solution will cause the crack crystal to dissolve but a flaky blue precipitate will remain.

Contents: (bottom ampoule) Cobalt thiocyanate in aqueous solution,
(cap ampoule) Stannous chloride in aqueous solution.

NO. 14: VALIUM® REAGENT

Valium, Rohypnol, Ketamine Test (2 ampoules)

Purpose: This reagent is used as a presumptive test for the presence of valium, rohypnol and ketamine.

Procedure:

1. Remove cap.
2. Deposit suspect material in tube.
3. Replace cap and tap firmly to ensure material falls to bottom of tube.
4. Break ampoule in bottom of tube. Agitate.
5. Break ampoule in cap. Agitate.

Color Reaction: All above listed substances will produce a Reddish Purple color reaction.

Contents: (bottom ampoule) A solution of Potassium Hydroxide in Methanol, (cap ampoule) A solution of m-Dinitrobenzene in Isopropanol

NO. 15: METHAMPHETAMINE/MDMA (ECSTASY) REAGENT

Methamphetamine, MDMA (Ecstasy) Test (2 ampoules)

Purpose: This reagent is used as a presumptive test for the presence of methamphetamine and MDMA (Ecstasy).

Procedure:

1. Remove cap.
2. Deposit suspect material in tube.
3. Replace cap and tap firmly to ensure material falls to bottom of tube.
4. Break ampoule in bottom of tube. Agitate.
5. Break ampoule in cap. Agitate.

Color Reaction: All above listed substances will produce an immediate Dark Blue or Dark Purple color.

Contents: (bottom ampoule) An aqueous solution of Sodium Carbonate and Sodium Nitroferricyanide (cap ampoule) An aqueous solution of Acetaldehyde and Ethylenediaminetetraacetic Acid

NO. 16: MECKE'S REAGENT MODIFIED REAGENT

All Heroin (white, brown, black tar) Test (2 ampoules)

Purpose: This reagent is used as a presumptive test for the presence of all Heroin (white, brown and black tar).

Procedure:

1. Remove cap.
2. Deposit into the tube the following amounts of suspect material:
 - Black Tar Heroin—an amount equal this circle●.
 - Brown Heroin—an amount equal to●.
 - White Heroin—an amount equal this circle ●.
 - Opiates—an amount equal to ●.

3. Replace cap and tap firmly to ensure material falls to bottom of tube.
4. Break ampoule in bottom of tube. Agitate.
5. Break ampoule in cap. Agitate.

Color Reaction: All above listed substances will produce a slow developing green color.

Contents: (bottom ampoule) Concentrated Sulfuric Acid
(cap ampoule) A solution of Sulfuric Acid and Selenious Acid

NO. 18: TALWIN REAGENT

Talwin® Test (2 ampoules)

Purpose: This reagent is used as a presumptive test for the presence of Talwin®.

Procedure:

1. Remove cap.
2. Deposit suspect material in tube.
3. Replace cap and tap firmly to ensure material falls to bottom of tube.
4. Break ampoule in bottom of tube. Agitate.
5. Break ampoule in cap. Agitate.

Color Reaction:

1. After breakage and agitation of the bottom ampoule, a purple color will develop after 2-3 minutes if Talwin® is present.
2. After breakage of the top ampoule, an immediate yellow color will develop in the presence of Talwin®.

Contents: (bottom ampoule) A solution of sulfuric acid and selenious acid,
(cap ampoule) A 10% solution of Nitric Acid

NO. 19: EPHEDRINE REAGENT

Ephedrine Test (2 ampoules)

Purpose: This reagent is used as a presumptive test for the presence of ephedrine and pseudoephedrine.

Procedure:

1. Remove cap.
2. Deposit suspect material in tube.
3. Replace cap and tap firmly to ensure material falls to bottom of tube.
4. Break ampoule in bottom of tube. Agitate.
5. Break ampoule in cap. Agitate.

Color Reaction: All above listed substances will produce a blue color reaction.

Contents: (bottom ampoule) An aqueous solution of Sodium Carbonate and Sodium Nitroferricyanide,
(cap ampoule) A solution of m-Dinitrobenzene in Isopropanol

NO. 22: SPECIAL OPIATES REAGENT

Heroin, Codeine, Morphine, Oxycodone Test (1 ampoule)

Purpose: This reagent is used as a presumptive test for the presence of Heroin, Codeine and Oxycodone.

Procedure:

1. Remove cap.
2. Deposit suspect material in tube.
3. Replace cap and tap firmly to ensure material falls to bottom of tube.
4. Break ampoule in bottom of tube. Agitate.

Color Reaction:

1. Codeine is indicated by the development of an immediate blue color.
2. Heroin presents itself as an immediate green color developing to purple.
3. Morphine is indicated by the development of an immediate blue/green color developing to a gray color within 2-3 minutes.
4. Oxycodone is indicated by the development of a yellow color.

Contents: (bottom ampoule) A solution of Sulfuric Acid and Selenious Acid

NO. 29: PCP REAGENT

PCP, Methaqualone Test (2 ampoules)

Purpose: This reagent is used as a presumptive test for the presence of PCP and Methaqualone.

Procedure:

1. Remove cap.
2. Deposit suspect material in tube.
3. Replace cap and tap firmly to ensure material falls to bottom of tube.
4. Break ampoule in bottom of tube. Agitate.
5. Break ampoule in cap. Agitate.

Color Reaction:

1. A pink field with blue specks is indicative of PCP.
2. A solid blue solution is indicative of Methaqualone.

Contents: (bottom ampoule) An aqueous solution of Cobalt Thiocyanate,
(cap ampoule) Concentrated Phosphoric Acid

KITS: ORDERING INFORMATION	
NART00	Standard Kit (one box of ten each Reagents No. 1-8)
NART01	International Kit (Standard Kit except Reagent No. 9 (is substituted for Reagent No. 8)
REPLACEMENT REAGENTS	
NART001	No. 1 Mayer's Reagent — Alkaloids, Amphetamines
NART002	No. 2 Marquis Reagent — Amphetamines, Heroin, Morphine
NART003	No. 3 Nitric Acid Reagent — Heroin, Morphine
NART004	No. 4 Cobalt Thiocyanate Reagent — Cocaine
NART005	No. 5 Dille-Koppanyi Reagent — Barbiturates
NART006	No. 6 Mandelin Reagent — Amphetamines
NART007	No. 7 Ehrlich's Reagent — LSD
NART008	No. 8 Duquenois Reagent — Marijuana, THC
NART009	No. 9 KN (Fast B Blue Salt) Reagent — Marijuana, THC
NART0013	No. 13 Cobalt-Thiocyanate Reagent (Modified)—Cocaine (HCl, Freebase, Crack)
NART0014	No. 14 Valium Reagent — Valium, Rohypnol, Ketamine
NART0015	No. 15 Methamphetamine Reagent — Methamphetamine, MDMA
NART0016	No. 16 Mecke's Modified Reagent — Heroin
NART0018	No. 18 Talwin Reagent — Talwin
NART0019	No. 19 Ephedrine Reagent — Ephedrine
NART0022	No. 22 Special Opiates Reagent — Heroin, Oxycodone
NART0029	No. 29 PCP Reagent — PCP, Methaqualone
MISCELLANEOUS SUPPLIES	
NART0010	Poly Bags (10 each)
NART0011	Acid Neutralizer
NART0012	Polyethylene Case














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Kovar, Karl-Artur and Martina Laudszun. *Chemistry and Reaction Mechanisms of Rapid Tests for Drugs of Abuse and Precursors Chemicals*, United Nations Scientific and Technical Notes v.89-51669, Germany. February 1989.











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United Nations International Drug Control Programme. *Rapid Testing Methods of Drugs of Abuse*, UN standard ST/NAR/13/REV.1, United Nations, New York, NY. 1994.

NARK® Color Identification Chart

			NAR100 STANDARD KIT TESTS	
TEST	REAGENT NAME	TEST FOR	FINAL COLOR	
No. 1	Mayer's Reagent	Alkaloids, Amphetamine	 Tan/Cream	
No. 2	Marquis Reagent	Amphetamines	 Red-Brown	
		Heroin	 Red-Purple	
No. 3	Nitric Acid	MDMA (Ecstasy)	 Black	
		Heroin	 Green-Yellow	
		Morphine	 Orange-Yellow	
No. 4	Cobalt-Thiocyanate Reagent	Cocaine	 Blue Spots in Pink	
No. 5	Dille-Koppanyi Reagent	Barbiturates	 Dark Purple	
No. 6	Mandelin Reagent	Methadone	 Green-Navy	
		Amphetamines	 Yellow-Green	
No. 7	Ehrlich's Reagent	LSD (Lysergic Acid Diethylamide)	 Red-Violet	
No. 8	Duquenois-Levine Reagent	Marijuana, THC	 Lite Blue or  Purple	

NARK® Color Identification Chart

TEST	REAGENT NAME	TEST FOR	FINAL COLOR
No. 9	KN (Fast B Blue Salt) Reagent	Marijuana, THC	 Orange-Red
No. 13	Cobalt-Thiocyanate (Modified)	Cocaine (HCl, Freebase, Crack)	 Blue Spots in Pink
No. 14	Valium Reagent	Valium, Rohypnol, Ketamine	 Lite Violet
No. 15	Methamphetamine Reagent	Methamphetamine, MDMA	 Navy Blue or Purple
No. 16	Mecke's Modified Reagent	Heroin	 Green-Blue
No. 18	Talwin Reagent	Talwin	 Yellow
No. 19	Ephedrine Reagent	Ephedrine	 Purple
No. 22	Special Opiates Reagent	Heroin, Oxycodone	 Red-Violet
No. 29	PCP Reagent	PCP	 Blue Spots in Pink
		Methaqualone	 Blue

NARK® is a registered trademark of SIRCHIE.



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