



Package insert for the AMP/mAMP/COC/OPI/THC/BZO/OXY/MTD/BAR/BUP/COT/MDMA test for oral fluids. A rapid, screening test for the simultaneous, qualitative detection of Amphetamine, Methamphetamine, Cocaine, Opiate, Marijuana, Benzodiazepines, Oxycodone, Methadone, Barbiturates, Buprenorphine, Cotinine, Methylenedioxymethamphetamine and their metabolites in human oral fluid.

#### For Forensic Use, Employment Use and Insurance Testing Use Only

#### INTENDED USE

The **STAT SWAB® Oral Fluid Drug Screen Device** for AMP/mAMP/COC/OPI/THC/BZO/OXY/MTD/BAR/BUP/COT/MDMA is a lateral flow chromatographic immunoassay for the qualitative detection of Amphetamine, Methamphetamine, Cocaine, Opiate, Marijuana, Benzodiazepines, Oxycodone, Methadone, Barbiturates, Buprenorphine, Cotinine, Methylenedioxymethamphetamine and their metabolites in oral fluids at the following cut-off concentrations:

Test	Calibrator	Cut-off
Amphetamine (AMP)	D-Amphetamine	50 ng/mL
Methamphetamine (mAMP)	D-Methamphetamine	50 ng/mL
Cocaine (COC)	Benzoyllecgonine	20 ng/mL
	Benzoyllecgonine	50 ng/mL
Opiate (OPI)	Morphine	40 ng/mL
	Morphine	50 ng/mL
Marijuana (THC)	11-nor- $\Delta^9$ -THC-9-COOH	12 ng/mL
	$\Delta^9$ -THC	25 ng/mL
	$\Delta^9$ -THC	50 ng/mL
	$\Delta^9$ -THC	75 ng/mL
Benzodiazepines (BZO)	Oxazepam	50 ng/mL
	Oxazepam	30 ng/mL
Oxycodone (OXY)	Oxycodone	50 ng/mL
Methadone (MTD)	Methadone	75 ng/mL
Barbiturates (BAR)	Secobarbital	300 ng/mL
Buprenorphine (BUP)	Buprenorphine	10 ng/mL
Cotinine (COT)	Cotinine	30 ng/mL
Methylenedioxymethamphetamine (MDMA)	(±)-3,4-Methylenedioxymethamphetamine	50 ng/mL

This assay provides only a preliminary analytical test result. A more specific alternate chemical method must be used in order to obtain a confirmed analytical result. Gas chromatography/mass spectrometry (GC/MS) and gas chromatography/tandem mass spectrometry (GC/MS/MS) are the preferred confirmatory methods. Professional judgment should be applied to any drug of abuse test result, particularly when preliminary positive results are indicated.

**This test is limited for forensic use, employment use and insurance testing. This test system shall not be used for Federal drug testing programs.**

#### SUMMARY AND EXPLANATION OF THE TEST

The **STAT SWAB® Oral Fluid Drug Screen Device** for AMP/mAMP/COC/OPI/THC/BZO/OXY/MTD/BAR/BUP/COT/MDMA and their metabolites is a rapid, oral fluid screening test that can be performed without the use of an instrument. The test utilizes monoclonal antibodies to selectively detect elevated levels of specific drugs in human oral fluid.

#### AMPHETAMINE (AMP)

Amphetamine is a sympathomimetic amine with therapeutic indications. The drug is often self-administered by nasal inhalation or oral ingestion. Depending on the route of administration, Amphetamine can be detected in oral fluid as early as 5-10 minutes and up to 72 hours after use<sup>1</sup>.

The Amphetamine assay contained within the **STAT SWAB® Oral Fluid Drug Screen Device** yields a positive result when the Amphetamine concentration in oral fluid exceeds 50 ng/mL.

#### METHAMPHETAMINE (mAMP)

Methamphetamine is a potent stimulant chemically related to amphetamine but with greater CNS stimulation properties. The drug is often self-administered by nasal inhalation, smoking or oral ingestion. Depending on the route of administration, methamphetamine can be detected in oral fluid as early as 5-10 minutes and up to 72 hours after use<sup>1</sup>.

The Methamphetamine assay contained within the **STAT SWAB® Oral Fluid Drug Screen Device** yields a positive result when the Methamphetamine concentration in oral fluid exceeds 50 ng/mL.

#### COCAINE (COC)

Cocaine is a potent central nervous system (CNS) stimulant and a local anesthetic derived from the coca plant (erythroxylum coca). The drug is often self-administered by nasal inhalation, intravenous injection and free-base smoking. Depending on the route of administration, cocaine and metabolites benzoyllecgonine and ecgonine methyl ester can be detected in oral fluid as early as 5-10 minutes following use<sup>1</sup>. Cocaine and benzoyllecgonine can be detected in oral fluids for up to 24 hours after use<sup>1</sup>.

The Cocaine assay contained within the **STAT SWAB® Oral Fluid Drug Screen Device** yields a positive result when the Benzoyllecgonine concentration in oral fluid exceeds 20 ng/mL.

The Cocaine assay contained within the **STAT SWAB® Oral Fluid Drug Screen Device** yields a positive result when the Benzoyllecgonine concentration in oral fluid exceeds 50 ng/mL.

#### OPIATE (OPI)

The drug class opiates refer to any drug that is derived from the opium poppy, including naturally occurring compounds such as morphine and codeine and semi-synthetic drugs such as heroin. Opiate act to control pain by depressing the central nervous system. The drugs demonstrate addictive properties when used for sustained periods of time; symptoms of withdrawal may include sweating, shaking, nausea and irritability. Opiates can be taken orally or by injection routes including intravenous, intramuscular and subcutaneous; illegal users may also take the intravenously or by nasal inhalation. Using an immunoassay cut-off level of 40 ng/mL, codeine can be detected in the oral fluid within 1 hour following a single oral dose and can remain detectable for 7-21 hours after the dose<sup>2</sup>. 6-monoacetylmorphine (6-MAM) is found more prevalently in oral fluid, and is a metabolic product of heroin. Morphine is the major metabolic product of codeine and heroin, and is detectable for 24-48 hours after an opiate dose.

The Opiate assay contained within the **STAT SWAB® Oral Fluid Drug Screen Device** yields a positive result when the Morphine concentration in oral fluid exceeds 40 ng/mL.

The Opiate assay contained within the **STAT SWAB® Oral Fluid Drug Screen Device** yields a positive result when the Morphine concentration in oral fluid exceeds 50 ng/mL.

#### MARIJUANA (THC)

Tetrahydrocannabinol, the active ingredient in the marijuana plant (cannabis sativa), is detectable in saliva shortly after use. The detection of the drug is thought to be primarily due to the direct exposure of the drug to the mouth (oral and smoking administrations) and the subsequent sequestering of the drug in the buccal cavity<sup>3</sup>. Historical studies have shown a window of detection for THC in saliva of up to 14 hours after drug use<sup>3</sup>.

The Marijuana assay contained within the **STAT SWAB® Oral Fluid Drug Screen Device** yields a positive result when the 11-nor- $\Delta^9$ -THC-9-COOH concentration in oral fluid exceeds 12 ng/mL.

The Marijuana assay contained within the **STAT SWAB® Oral Fluid Drug Screen Device** yields a positive result when the  $\Delta^9$ -THC concentration in oral fluid exceeds 25 ng/mL.

The Marijuana assay contained within the **STAT SWAB® Oral Fluid Drug Screen Device** yields a positive result when the  $\Delta^9$ -THC concentration in oral fluid exceeds 50 ng/mL.

The Marijuana assay contained within the **STAT SWAB® Oral Fluid Drug Screen Device** yields a positive result when the  $\Delta^9$ -THC concentration in oral fluid exceeds 75 ng/mL.

#### BENZODIAZEPINES (BZO)

Benzodiazepines are frequently prescribed sedative and hypnotic drug for the symptomatic treatment of anxiety, insomnia, sleep and seizure disorders. Most Benzodiazepines are extensively metabolized in the liver and excreted in the urine and saliva as metabolites. Chronic abuse may increase the risk of physical dependence and may result in intoxication, drowsiness and muscle relaxation. Oxazepam is the major metabolic product of Benzodiazepines.

The Benzodiazepines assay contained within the **STAT SWAB® Oral Fluid Drug Screen Device** yields a positive result when the Oxazepam concentration in oral fluids exceeds 50 ng/mL.

The Benzodiazepines assay contained within the **STAT SWAB® Oral Fluid Drug Screen Device** yields a positive result when the Oxazepam concentration in oral fluids exceeds 30 ng/mL.

#### OXYCODONE (OXY)

Oxycodone is a semi-synthetic opioid with a structural similarity to codeine. The drug is manufactured by modifying thebaine, an alkaloid found in the opium poppy. Oxycodone, like all opiate agonists, provides pain relief by acting on opioid receptors in the spinal cord, brain, and possibly directly in the affected tissues. Oxycodone is prescribed for the relief of moderate to high pain under the well-known pharmaceutical trade names of OxyContin®, Tylox®, Percodan® and Percocet®. While Tylox, Percodan and Percocet contain only small doses of oxycodone hydrochloride combined with other analgesics such as acetaminophen or aspirin, OxyContin consists solely of oxycodone hydrochloride in a time-release form.

The Oxycodone assay contained within the **STAT SWAB® Oral Fluid Drug Screen Device** yields a positive result when the Oxycodone concentration in oral fluid exceeds 50 ng/mL.

#### METHADONE (MTD)

Methadone is a narcotic analgesic prescribed for the management of moderate to severe pain and for the treatment of opiate dependence (heroin, Vicodin, Percocet, morphine). The pharmacology of oral methadone is very different from IV methadone. Oral methadone is partially stored in the liver for later use. IV methadone acts more like heroin. In most states you must go to a pain clinic or a methadone maintenance clinic to be prescribed methadone. Methadone is a long acting pain reliever producing effects that last from twelve to forty-eight hours. Ideally, methadone frees the client from the pressures of obtaining illegal heroin, from the dangers of injection, and from the emotional roller coaster that most opiates produce. Methadone, if taken for long periods and at large doses, can lead to a very long withdrawal period. The withdrawals from methadone are more prolonged and troublesome than those provoked by heroin cessation, yet the substitution and phased removal of methadone is an acceptable method of detoxification for patients and therapists<sup>4</sup>.

The Methadone assay contained within the **STAT SWAB® Oral Fluid Drug Screen Device** yields a positive result when the Methadone concentration in oral fluids exceeds 75 ng/mL.

#### BARBITURATES (BAR)

Barbiturates are CNS depressants. They are used therapeutically as sedatives, hypnotics, and anticonvulsants. Barbiturates are almost always taken orally as capsules or tablets. The effects resemble those of intoxication with alcohol. Chronic use of barbiturates leads to tolerance and physical dependence. Short-acting barbiturates taken at 400 mg/day for 2-3 months can produce a clinically significant degree of physical dependence. Withdrawal symptoms experienced during periods of drug abstinence can be severe enough to cause death.

The approximate detection time limits for barbiturates are:

Short acting (e.g. Secobarbital) 100 mg PO (oral) 4.5 days  
Long acting (e.g. Phenobarbital) 400 mg PO (oral) 7 days<sup>5</sup>

The Barbiturates assay contained within the **STAT SWAB® Oral Fluid Drug Screen Device** yields a positive result when the Secobarbital concentration in oral fluid exceeds 300 ng/mL.

#### BUPRENORPHINE (BUP)

Buprenorphine is a potent analgesic often used in the treatment of opioid addiction. The drug is sold under the trade names Subutex™, Buprenex™, Temgesic™ and Suboxone™, which contain Buprenorphine HCl alone or in combination with Naloxone HCl. Therapeutically, Buprenorphine is used as a substitution treatment for opioid addicts. Substitution treatment is a form of medical care offered to opiate addicts (primarily heroin addicts) based on a similar or identical substance to the drug normally used. In substitution therapy, Buprenorphine is as effective as Methadone but demonstrates a lower level of physical dependence. Substantial abuse of Buprenorphine has also been reported in many countries where various forms of the drug are available. The drug has been diverted from legitimate channels through theft, doctor shopping, and fraudulent prescriptions, and been abused via intravenous, sublingual, intranasal and inhalation routes.

The Buprenorphine assay contained within the **STAT SWAB® Oral Fluid Drug Screen Device** yields a positive result when the Buprenorphine concentration in oral fluid exceeds 10 ng/mL.

#### COTININE (COT)

Cotinine ((5S)-1-methyl-5-(3-pyridyl)pyrrolidin-2-one) is a first-stage metabolite of nicotine, an alkaloid that stimulates the autonomic ganglia and central nervous system in humans. Nicotine is a drug to which virtually every member of a tobacco-smoking society is exposed whether through direct contact or second-hand inhalation. Aside from tobacco, nicotine is also commercially available as the active ingredient in smoking replacement therapies such as nicotine gum, transdermal patches and nasal sprays. Once converted from Nicotine, Cotinine has an in vivo half-life in human body for approximately 20 hours and is typically detectable for several days and up to one week after the use of tobacco. The level of cotinine in the blood, urine or saliva is proportionate to the amount of exposure to tobacco smoke. Cotinine, therefore, is a valuable indicator of tobacco smoke exposure, including secondary or passive smoke. People who smoke menthol cigarettes may retain cotinine in the blood for a longer period because menthol can compete with enzymatic metabolism of cotinine<sup>6</sup>. Genetic encoding of liver enzymes may also play a role, as people of African descent routinely register higher blood cotinine levels than Caucasians<sup>7</sup>. Cotinine levels <10 ng/mL are considered to be consistent with no active smoking. Values of 10 ng/mL to 100 ng/mL are associated with light smoking or moderate passive exposure, and levels above 300 ng/mL are seen in heavy smokers who smoke more than 20 cigarettes a day. Values between 11 ng/mL and 30 ng/mL may be associated with light smoking or passive exposure, and levels in active smokers typically reach 500 ng/mL or more. Cotinine assays provide an objective quantitative measure that is more reliable than smoking histories or counting the number of Cotinine also permits the measurement of exposure to second-hand smoke or passive smoking. Various types of drug tests can detect cotinine in the blood, urine, or saliva. Cotinine level in saliva has been found to be the best marker for smoking status compared with saliva nicotine measurements, breath carbon monoxide testing and plasma thiocyanate testing<sup>8</sup>.

The Cotinine assay contained within the **STAT SWAB® Oral Fluid Drug Screen Device** yields a positive result when the Cotinine concentration in oral fluid exceeds 30 ng/mL.

#### METHYLENEDIOXYMETHAMPHETAMINE (MDMA)

Methylenedioxymethamphetamine (ecstasy) is a designer drug first synthesized in 1914 by a German drug company for the treatment of obesity. Those who take the drug frequently report adverse effects, such as increased muscle tension and sweating. MDMA is not clearly a stimulant, although it has, in common with amphetamine drugs, a capacity to increase blood pressure and heart rate. MDMA does produce some perceptual changes in the form of increased sensitivity to light, difficulty in focusing, and blurred vision in some users. Its mechanism of action is thought to be via release of the neurotransmitter serotonin. MDMA may also release dopamine, although the general opinion is that this is a secondary effect of the drug (Nichols and Oberlander, 1990). The most pervasive effect of MDMA, occurring in virtually all people who took a reasonable dose of the drug, was to produce a clenching of the jaws.

The Methylenedioxymethamphetamine assay contained within the **STAT SWAB® Oral Fluid Drug Screen Device** yields a positive result when the Methylenedioxymethamphetamine concentration in oral fluid exceeds 50 ng/mL.

#### PRINCIPLE

The **STAT SWAB® Oral Fluid Drug Screen Device** for AMP/mAMP/COC/OPI/THC/BZO/OXY/MTD/BAR/BUP/COC/MDMA is an immunoassay based on the principle of competitive binding. Drugs that may be present in the oral fluid specimen compete against their respective drug conjugate for binding sites on their specific antibody.

During testing, a portion of the oral fluid specimen migrates upward by capillary action. A drug, if present in the oral fluid specimen below its cut-off concentration, will not saturate the binding sites of its specific antibody. The antibody will then react with the drug-protein conjugate and a visible colored line will show up in the test line region of the specific drug strip. The presence of drug above the cut-off concentration in the oral fluid specimen will saturate all the binding sites of the antibody. Therefore, the colored line will not form in the test line region.

A drug-positive oral fluid specimen will not generate a colored line in the specific test line region of the strip because of drug competition, while a drug-negative oral fluid specimen will generate a line in the test line region because of the absence of drug competition.

To serve as a procedural control, a colored line will always appear at the control line region, indicating that proper volume of specimen has been added and membrane wicking has occurred.

### REAGENT

The test contains membrane strips coated with drug-protein conjugates (purified bovine albumin) on the test line, a goat polyclonal antibody against gold-protein conjugate at the control line, and a dye pad which contains colloidal gold particles coated with mouse monoclonal antibody specific to Amphetamine, Methamphetamine, Benzoyllecgonine, Morphine, Marijuana, Oxazepam, Oxycodone, Methadone, Secobarbital, Buprenorphine, Cotinine and Methyleneiodoxymethamphetamine.

### PRECAUTIONS

- For forensic use, employment use and insurance testing use only.
- Do not use after the expiration date.
- The oral fluid drug screen device should remain in the sealed pouch until use.
- Saliva is not classified as biological hazard unless derived from a dental procedure.
- The test device is for single use.
- The used collector and device should be discarded according to federal, state and local regulations.

### STORAGE AND STABILITY

Store as packaged in the sealed pouch at 2-30°C. The test is stable through the expiration date printed on the sealed pouch. The test devices must remain in the sealed pouch until use. DO NOT FREEZE. Do not use beyond the expiration date.

### SPECIMEN COLLECTION AND PREPARATION

The oral fluid specimen should be collected using the collector provided with the kit. Follow the detailed Directions for Use below. No other collection devices should be used with this assay. Oral fluid collected at any time of the day may be used.

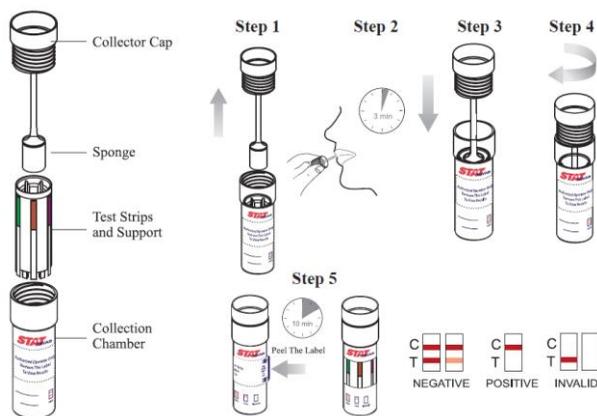
### MATERIALS

- Materials Provided
- Test devices
  - Package insert
  - Procedure card
- Materials Required But Not Provided
- Timer

### DIRECTIONS FOR USE

**Allow the test device to reach room temperature [15-30°C (59-86°F)] prior to testing. Do not place anything in the mouth including food, drink, gum, or tobacco products for at least 10 minutes prior to collection of oral fluid specimen.**

1. Remove the collection stick and test tube from the sealed pouch.
2. Tear off the package of the collection stick. (Step 1)
3. Insert the sponge end of the collection stick into mouth and soak sponge into saliva for 3 minutes. (Note: Time should be longer for people of little saliva. If the amount of saliva pressed into the test tube is not adequate for testing, collect more with another new collection stick and express the saliva into tube again.) (Step 2)
4. Hold the test tube vertically and place the collection stick with saturated sponge into the test tube. Make sure to fit the groove of collection stick onto the guide rail of test tube and press the collection stick to full extent. (Step 3)
5. Press down the lid to close the test tube. Keep the test tube vertically until you begin to read the test results. (Step 4)
6. Read results of drug tests at 10 minutes. (If there is a label over reading window, peel off the label to read test results.) **Do not read drug tests results after 1 hour.** (Step 5)
7. Send the collector with collected oral fluid to the laboratory for GC/MS confirmation if necessary.



### INTERPRETATION OF RESULTS

(Please refer to the previous illustration)

#### NEGATIVE:

Two lines appear. \* One color line should be in the control region (C), and another apparent color line adjacent should be in the test region (T). This negative result indicates that the drug concentration is below the detectable level.

\*NOTE: The shade of color in the test line region (T) will vary, but it should be considered negative whenever there is even a faint distinguishable color line.

#### POSITIVE:

One color line appears in the control region (C). No line appears in the test region (T). This positive result indicates that the drug concentration is above the detectable level.

#### INVALID:

Control line fails to appear. Insufficient specimen volume or incorrect procedural techniques are the most likely reasons for control line failure. Review the procedure and repeat the test using a new test device. If the problem persists, discontinue using the lot immediately and contact your supplier.

### QUALITY CONTROL

A procedural control is included in the test. A color line appearing in the control region (C) is considered an internal procedural control. It confirms sufficient specimen volume, adequate membrane wicking and correct procedural technique.

### LIMITATIONS

1. The **STAT SWAB® Oral Fluid Drug Screen Device** provides only a qualitative, preliminary analytical result. A secondary analytical method must be used to obtain a confirmed result. Gas chromatography/mass spectrometry (GC/MS) or gas chromatography/tandem mass spectrometry (GC/MS/MS) is preferred confirmatory methods.
2. A positive test result does not indicate the concentration of drug in the specimen or the route of administration.
3. A negative result may not necessarily indicate a drug-free specimen. Drug may be present in the specimen below the cut-off level of the assay.
4. The test has been developed for testing saliva samples only. No other fluids have been evaluated. Do NOT use this device to test anything but saliva.

### PERFORMANCE CHARACTERISTICS

#### Analytical Sensitivity

A phosphate-buffered saline (PBS) pool was spiked with drugs to target concentrations of ± 50% cut-off and ± 25% cut-off and tested with the **STAT SWAB® Oral Fluid Drug Screen Device**. The results are summarized below.

Drug Concentration Cut-off Range	n	AMP	mAMP	COC	OPI	THC	BZO	OXY	MTD	BAR	BUP	COT	MDMA
0% Cut-off	30	30	0	30	0	30	0	30	0	30	0	30	0
-50% Cut-off	30	30	0	30	0	30	0	30	0	30	0	30	0
-25% Cut-off	30	28	2	29	1	30	0	27	3	27	3	28	2
Cut-off	30	13	17	16	14	19	11	19	12	16	13	17	12
+25% Cut-off	30	4	36	7	23	5	25	3	37	1	29	4	26
+50% Cut-off	30	0	30	0	30	0	30	0	30	0	30	0	30

#### Analytical Specificity

The following table lists the concentration of compounds (ng/mL) above which the **STAT SWAB® Oral Fluid Drug Screen Device** for AMP/mAMP/COC/OPI/THC/BZO/OXY/MTD/BAR/BUP/COT/MDMA identified positive results at a read time of 10 minutes.

Drug	Concentration (ng/mL)
<b>AMPHETAMINE (AMP)</b>	
D-Amphetamine	50
DL-Amphetamine	125
β-Phenylethylamine	4,000
(+)-3,4-Methylenedioxyamphetamine (MDA)	150
L-Amphetamine	4,000
p-Hydroxyamphetamine	800
Tryptamine	1,500
Tyramine	1,000
<b>METHAMPHETAMINE (mAMP)</b>	
D-Methamphetamine	50
(1R,2S)-(-)-Ephedrine	400
Fenfluramine	60,000
Methoxyphenamine	25,000
3,4-Methylenedioxyamphetamine	50
p-Hydroxymethamphetamine	400
L-Phenylephrine	4,000
Procaine	2,000
<b>COCAINE (COC 20)</b>	
Benzoyllecgonine	20
Cocaine HCl	20
Cocaine base	25
Ecgonine HCl	1,500
Ecgonine Methyl Ester	12,500

<b>COCAINE (COC 50)</b>	
Benzoyllecgonine	50
Cocaine HCl	20
Cocaine base	25
Ecgonine HCl	1,500
Ecgonine Methyl Ester	12,500
<b>OPIATE (OPI 40)</b>	
Morphine	40
Bilirubin	3,500
Codeine	10
Diacetylmorphine (Heroin)	50
Ethylmorphine	24
Hydrocodone	100
Hydromorphone	100
Levorphanol	400
6-Monoacetylmorphine	25
Morphine 3-β-D-Glucuronide	50
Nalorphine	10,000
Normorphine	12,500
Norcodeine	1,500
Oxycodone	25,000
Oxymorphone	25,000
Thebaine	1,500
<b>OPIATE (OPI 50)</b>	
Morphine	50
Bilirubin	3,500
Codeine	10
Diacetylmorphine (Heroin)	50
Ethylmorphine	24
Hydrocodone	100
Hydromorphone	100
Levorphanol	400
6-Monoacetylmorphine	25
Morphine 3-β-D-Glucuronide	50
Nalorphine	10,000
Normorphine	12,500
Norcodeine	1,500
Oxycodone	25,000
Oxymorphone	25,000
Thebaine	1,500
<b>BENZODIAZEPINES (BZO 50)</b>	
α-Hydroxyalprazolam	1,260
Alprazolam	40
Bromazepam	400
Chlordiazepoxide	780
Chlordiazepoxide HCl	390
Clobazam	100
Clonazepam	785
Clorazepate Dipotassium	195
Delorazepam	1,560
Desalkylflurazepam	390
Diazepam	195
Estazolam	2,500
Flunitrazepam	385
(±) Lorazepam	1,560
RS-Lorazepam Glucuronide	160
Midazolam	12,500
Nitrazepam	95
Norchlordiazepoxide	200
Nordiazepam	390
Oxazepam	50
Temazepam	20
Triazolam	2,500
<b>BENZODIAZEPINES (BZO 30)</b>	
α-Hydroxyalprazolam	756
Alprazolam	24
Bromazepam	240
Chlordiazepoxide	468
Chlordiazepoxide HCl	234
Clobazam	60
Clonazepam	471
Clorazepate Dipotassium	117

Delorazepam	936
Desalkylflurazepam	234
Diazepam	117
Estazolam	1,500
Flunitrazepam	231
(±) Lorazepam	936
RS-Lorazepam Glucuronide	96
Midazolam	7,500
Nitrazepam	57
Norchlordiazepoxide	120
Nordiazepam	234
Oxazepam	30
Temazepam	12
Triazolam	1,500
OXYCODONE (OXY)	
Oxycodone	50
Codeine	25,000
Dihydrocodeine	6,250
Ethylmorphine	12,500
Hydrocodone	1,000
Hydromorphone	6,250
Oxymorphone	1,000
Thebaine	25,000
MARIJUANA (THC 25)	
11-nor-Δ <sup>9</sup> -THC-9-COOH	12
Cannabinol	2,000
Δ <sup>8</sup> -THC	25
Δ <sup>9</sup> -THC	25
MARIJUANA (THC 50)	
11-nor-Δ <sup>9</sup> -THC-9-COOH	12
Cannabinol	2,000
Δ <sup>8</sup> -THC	50
Δ <sup>9</sup> -THC	50
MARIJUANA (THC 75)	
11-nor-Δ <sup>9</sup> -THC-9-COOH	12
Cannabinol	3,000
Δ <sup>8</sup> -THC	75
Δ <sup>9</sup> -THC	75
METHADONE (MTD)	
Methadone	75
Doxylamine	12,500
BARBITURATES (BAR)	
Alphenal	150
Amobarbital	300
Aprobarbital	200
Butabarbital	75
Butalbital	2,500
Butethal	100
Cyclopentobarbital	600
Pentobarbital	300
Phenobarbital	100
Secobarbital	300
BUPRENORPHINE (BUP)	
Buprenorphine	10
Norbuprenorphine	20
Buprenorphine 3-D-Glucuronide	15
Norbuprenorphine 3-D-Glucuronide	200
COTININE (COT)	
(-)Cotinine	30
S-(-)-Nicotine	6,250
L-Glutathione Reduced	40,000
METHYLENEDIOXYMETHAMPHETAMINE (MDMA)	
(±)-3,4-Methylenedioxyamphetamine	50
Dobutamine Hydrochloride	60,000
p-Hydroxymethamphetamine	15,000
(+)-3,4-Methylenedioxyamphetamine (MDA)	1,500

## INTERFERENCE

A study was conducted to determine the cross-reactivity of the test with compounds spiked into drug-free PBS stock. The following compounds demonstrated no false positive results on the **STAT SWAB<sup>®</sup> Oral Fluid Drug Screen Device** when tested with concentrations up to 100 µg/mL.

### Amphetamine, Methamphetamine, Cocaine, Opiate, Marijuana, Benzodiazepines, Oxycodone, Methadone, Barbiturates and Buprenorphine Non-Cross-Reacting Compounds Are:

\*Parent compound only:

Chlorothiazide  
DL-Chlorpheniramine  
Chlorpromazine  
Chloroquine  
Chlorothiazide  
Norethindrone  
D-Norpropoxyphene  
Noscapine  
DL-Octopamine  
Creatinine  
Deoxycorticosterone  
Dextromethorphan  
Diclofenac  
Diflunisal  
Digoxin  
Diphenhydramine  
L-Ψ-Ephedrine  
β-Estradiol  
Estrone-3-Sulfate  
Ethyl-p-Aminobenzoate  
L-(-)-Epinephrine  
Erythromycin  
Fenoprofen  
Furosemide  
Gentisic Acid  
Hemoglobin  
Hydralazine  
Hydrochlorothiazide  
Hydrocortisone  
o-Hydroxyhippuric Acid  
p-Hydroxytyramine  
Ibuprofen  
Iproniazid  
DL-Isoproterenol  
Isoxsuprine  
Ketamine  
Ketoprofen  
Labetalol  
Loperamide  
Meperidine  
Methylphenidate  
Nalidixic Acid  
Naloxone  
Naltrexone  
Naproxen  
Niacinamide  
Nifedipine  
Oxalic Acid  
Oxolinic Acid  
Oxymetazoline  
Papaverine  
Penicillin-G  
Pentazocine Hydrochloride  
Perphenazine  
Phenelzine  
Trans-2-Phenylcyclopropylamine Hydrochloride  
Phenylpropanolamine  
Prednisolone  
Prednisone  
DL-Propranolol  
D-Propoxyphene  
D-Pseudoephedrine  
Quinacrine  
Quinine  
Quinidine  
Ranitidine  
Salicylic Acid  
Serotonin  
Sulfamethazine  
Sulindac  
Tetracycline  
Tetrahydrocortisone 3-Acetate

Tetrahydrocortisone 3 (β-D-Glucuronide)  
Thiamine  
Thioridazine  
DL-Tyrosine  
Tolbutamide  
Triamterene  
Trifluoperazine  
Trimethoprim  
DL-Tryptophan  
Uric Acid  
Verapamil  
Zomepirac

### Cotinine Non-Cross-Reacting Compounds are:

\*Parent compound only:

Acetaminophen  
Acetophenetidin  
N-Acetylprocainamide  
Acetylsalicylic Acid  
Amoxicillin  
Amphetamine Sulfate  
Ampicillin  
L-Ascorbic Acid  
Apomorphine  
Aspartame  
Atropine  
Cholesterol  
Clonidine  
Codeine  
Cortisone  
Benzoylcegonine  
Benzoic Acid  
Benzphetamine  
Caffeine  
Chloramphenicol  
Chlorothiazide  
Chlorpromazine  
Chloroquine  
Cocaine Hydrochloride  
Norethindrone  
D-Norpropoxyphene  
Noscapine  
DL-Octopamine  
Creatinine  
Dextromethorphan  
Diflunisal  
Digoxin  
L-Ψ-Ephedrine  
β-Estradiol  
Estrone-3-Sulfate  
Ethyl-p-Aminobenzoate  
L-(-)-Epinephrine  
Erythromycin  
Fenoprofen  
Furosemide  
Gentisic Acid  
Hemoglobin  
Heroin  
Hydralazine  
Hydrochlorothiazide  
Hydrocortisone  
Ibuprofen  
Isoxsuprine  
Ketamine  
Labetalol  
Loperamide  
Meperidine  
Methylphenidate  
Nalidixic Acid  
Naloxone  
Naltrexone  
Naproxen  
Niacinamide  
Nifedipine  
Oxalic Acid  
Oxolinic Acid  
Oxymetazoline  
Papaverine  
Penicillin-G  
Pentazocine Hydrochloride  
Perphenazine  
Phenelzine  
Phenylpropanolamine  
Prednisolone  
Prednisone  
DL-Propranolol  
D-Propoxyphene  
D-Pseudoephedrine  
Quinacrine  
Quinine  
Quinidine  
Ranitidine  
Salicylic Acid  
Serotonin  
Sulfamethazine  
Sulindac  
Tetracycline  
Meprobamate

Methylphenidate  
Morphine  
Nalidixic Acid  
Naloxone  
Naltrexone  
Naproxen  
Niacinamide  
Oxymetazoline  
Papaverine  
Penicillin-G  
Perphenazine  
Phencyclidine  
Phenelzine  
Hydrochloride  
Phenylpropanolamine  
Prednisolone  
Prednisone  
DL-Propranolol  
D-Propoxyphene  
D-Pseudoephedrine  
Quinacrine  
Quinine  
Oxycodone  
Ranitidine  
Secobarbital  
Salicylic Acid  
Serotonin  
Sulfamethazine  
Sulindac  
Tetracycline  
Thiamine  
Thioridazine  
DL-Tyrosine  
Tolbutamide  
Trifluoperazine  
Trimethoprim  
DL-Tryptophan  
Tyramine  
Uric Acid  
Verapamil  
Zomepirac

### Methylenedioxyamphetamine

#### Non-Cross-Reacting

#### Compounds are:

\*Parent compound only:

Acebutolol Hydrochloride  
Acetopromazine-d6 Hydrochloride  
Acetylcysteine  
Acetylsalicylic Acid (Aspirin)  
Acetaminophen  
o6-Acetylmorphine  
Acetazolamide  
N-Acetylprocainamide  
Acetone  
Acetophenetidin  
Alprenolol Hydrochloride  
Alprazolam  
Allopurinol  
Alphenal  
Amiloride Hydrochloride  
Aminophenazone (4-Dimethylaminoantipyrine)  
Amiodarone Hydrochloride  
Amoxicillin  
Ampicillin (Ampicinine)  
Amitriptyline Hydrochloride  
Aminophylline  
Amantadine Hydrochloride  
Amphotericin B  
Ammonium  
Amobarbital  
Amikacin Hydrate  
Amikacin Sulfate  
4-Aminobenzoic Acid  
DL-Aminoglutethimide  
Kanamycin Sulfate  
Aniline Hydrochloride  
Antipyrine  
R-(-)-Apomorphine Hydrochloride Hemihydrate  
Aprobarbital  
Aspartame

L-Ascorbic Acid  
L-Aspartic Acid  
D-Aspartic Acid  
DL-Aspartic Acid  
Atropine Sulfate  
Baclofen  
Benzphetamine  
Barbituric Acid  
Betamethasone  
Berberine Hydrochloride  
Beclomethasone Dipropionate Aerosol  
Benzilic Acid  
Benzocaine  
Benzyl Alcohol  
Benzoylcegonine  
Bendroflumethiazide  
Benzylamine Hydrochloride  
Benzoic Acid  
Bisacodyl  
Bromazepam  
Bromocriptine Mesylate  
Bupivacaine Hydrochloride  
Buprenorphine  
Buspirone Hydrochloride  
Butacaine  
Butalbital  
Butabarbital  
Buprenorphine-3-β-D-Glucuronide  
Butyrophenone  
Butethal  
Cannabidiol  
Caffeine  
Carbamazepine  
Carisoprodol  
Cefaclor  
Cefradine  
Ceftriaxone Sodium  
Cefotaxime Sodium  
Cefoxitin  
Cefuroxime Axetil (Zinnat)  
Cefadroxil  
Cephradine  
Chlordiazepoxide HCL  
Chloroquine Phosphate  
Chlorpheniramine Maleate  
Chlorpromazine Hydrochloride  
Chlorpropamide  
Chlorprothixene Hydrochloride  
Chlorthalidone  
Chlorzoxazone  
Chloral Hydrate (Trichloroacetaldehyde Hydrate)  
Cimetidine  
(-)-Cinchonidine  
Cinoxacin  
Cyclosporine  
Citric Acid  
Clenbuterol Hydrochloride  
Clindamycin  
Clobetasone Butyrate  
Clomipramine Hydrochloride  
Clorazepate Dipotassium  
Clonazepam  
Clobazam  
Cloxacillin  
Colchicine  
Cholesterol  
Compound Zinc Undecylenate Triamcinolone Acetonide Ointment  
(-)-Cotinine  
Cocaethylene  
Cocaine Hydrochloride  
Codeine  
Creatinine  
Cyclobenzaprine Hydrochloride  
Cyclophosphamide  
L-Cystine  
Cyproheptadine Hydrochloride  
Cyclopentobarbital  
Dantrolene Sodium Salt  
Dextromethorphan Hydrobromide  
Dexamethasone Acetate  
Deoxyepinephrine  
Deferoxamine Mesylate

Desipramine Hydrochloride  
Dimethyl Isosorbide  
(Isosorbide Dimethyl Ether)  
Diazepam  
Diflorasone Diacetate  
Digoxin  
Diazoxide  
Dieldrin  
Dipyrrone  
Dimethyl Sulfoxide  
5,5-Diphenylhydantoin  
DL-3,4-Dihydroxymandelic Acid  
Dihydralazine  
Hemoglobin  
Disopyramide  
Dopamine Hydrochloride  
Doxepin Hydrochloride  
Doxycycline Hyclate  
Doxylamine Succinate Salt  
Droperidol  
Ecgonine Methyl Ester  
(±)-Ephedrine Hydrochloride  
Erythromycin Enteric  
Eserine  
Estazolam  
β-Estradiol  
Estriol  
Estrone  
Estrone-3-Sulfate Potassium Salt  
Etoposide  
Ethacrynic Acid  
Ethambutol Hydrochloride  
Ethyl-p-Aminobenzoate  
Ethylenediaminetetraacetic Acid  
Etodolac  
Ethyl Morphine

Famotidine  
Fenfluramine  
Ferrous(II) Sulfate Heptahydrate  
Fenopropfen Calcium Salt Hydrate  
Flufenamic Acid  
Flunitrazepam  
Flunisolide  
Flurandrenolide  
Flurazepam Dihydrochloride  
Furosemide  
Gemfibrozil  
Gentamicin Sulfate Granules  
Gentisic Acid  
Glutathione Reduced  
Glybenclamide  
Glucose  
Griseofulvin  
Halcinonide  
Heroin Hydrochloride  
Hexachlorophene  
Hypnovel (Cyclobarbital)  
Hippuric Acid  
Histamine  
Hydralazine Hydrochloride  
(1R,9S)-(-)-β-Hydrastine  
Hydroflumethiazide  
Hydromorphone  
Hydrocodone  
Hydroxocobalamin Hydrochloride  
α-Hydroxyhippuric Acid  
Hydroxyzine Dihydrochloride  
α-Hydroxyalprazolam  
17α-Hydroxyprogesterone  
Hydrocortisone  
Hydrochlorothiazide  
Hypoxanthine

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