

## Securetec – Drug testing from A – Z

Reference	Product name	Sample
<b>D.TecT® multi tests</b>		
096-DOA-154	D.TecT® Multi dip test	Urine
095-DOA-155	D.TecT® Multi pipette test	Urine
097-DOA-157	D.TecT® Multi cup test	Urine
091-ADU	Adulteration test strips	Urine
<b>DrugWipe® single tests</b>		
001-CAN	DrugWipe® Cannabis	Saliva, sweat, surfaces
002-COC	DrugWipe® Cocaine	Saliva, sweat, surfaces
003-OPI	DrugWipe® Opiates	Saliva, sweat, surfaces
004-AMP	DrugWipe® Amphetamines (Ecstasy/Methamphetamines)	Saliva, sweat, surfaces
005-BEN	DrugWipe® Benzodiazepines	Saliva, sweat, surfaces
006-MTD	DrugWipe® Methadone	Saliva
<b>DrugWipe® TWIN</b>		
0014-TWIN-C/A	DrugWipe® TWIN Cannabis/Amphetamines	Saliva, sweat, surfaces
0023-TWIN-C/O	DrugWipe® TWIN Cocaine/Opiates	Saliva, sweat, surfaces
<b>DrugWipe® 5</b>		
008-DW-5	DrugWipe® 5 Cannabis, Amphetamines (Ecstasy/Methamphetamines), Cocaine, Opiates	Saliva, sweat, surfaces
009-DW-5+	DrugWipe® 5+ Cannabis, Amphetamines (Ecstasy/Methamphetamines), Cocaine, Opiates	Saliva
<b>DrugID®</b>		
031-DI-CAN	DrugID® Cannabis	Substances
032-DI-COC	DrugID® Cocaine	Substances
033-DI-OPI	DrugID® Opiates	Substances
034-DI-AMP	DrugID® Amphetamines	Substances
<b>DrugRead®</b>		
049-DRUGREAD	DrugRead®	Reader for DrugWipe®

## Securetec – World Renowned Specialist

Securetec's detection systems are successfully employed across a multitude of applications. In-house development and production facilities ensure that our products meet the highest clinical and manufacturing standards.

Matters of security demand sensitivity and confidentiality. By close cooperation with our customers we can identify their specific needs and develop solutions for efficient and effective day-to-day use.

As one of the worlds' leading developers of detection systems, Securetec provides solutions for traffic safety, customs, border control and drug enforcement authorities across the globe. Our systems guarantee fast, reliable detection of a diverse range of drugs and dangerous substances.

For industrial and commercial corporations, educational institutions and drug prevention/rehabilitation organisations,

we offer a consultancy service. With our extensive experience of the rapid identification of drugs and dangerous substances from around the globe, we can develop and implement security concepts, organisational solutions and training that is tailored to any entity's specific requirements.



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# D.TecT®

## For the detection of drugs in urine

we detect to protect

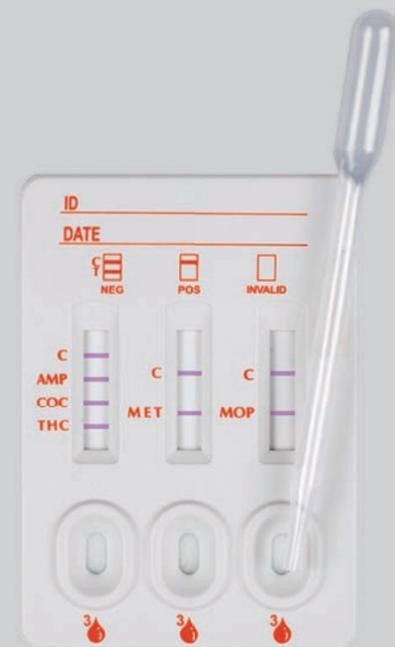
we detect to protect



Results: negative

### Dip tests

Single and multi tests



Results: negative

### Pipette tests

Single and multi tests



Results: negative

### Cup tests

Multi tests

## D.TecT® – Rapid drug tests

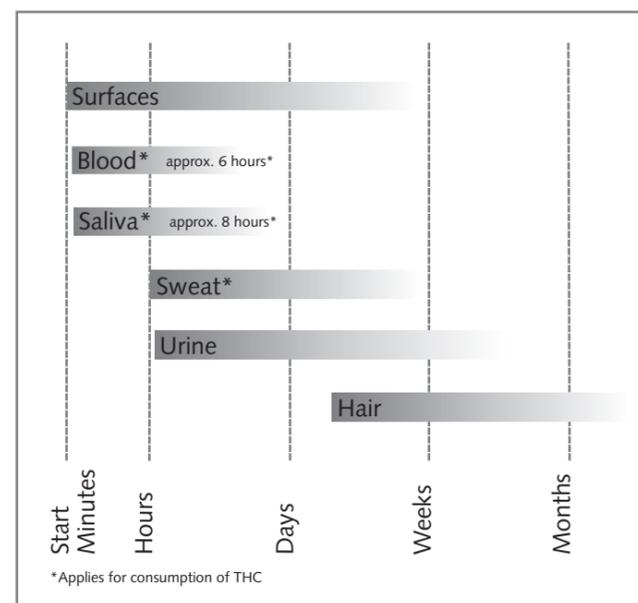
The D.TecT® product range consists of the common dip, pipette and cup test formats for analysing urine samples quickly and reliably. Drugs are metabolized in the human body. The metabolites are distributed into the urine and can be detected here with the help of specific reagents (antibodies) used in the D.TecT® tests. Urine is a suitable commodity for the detection of drug consumption in the past hours or days. A positive result in urine is not necessarily proof of current impairment but does imply an attitude and behaviour towards irresponsibly taking drugs and driving or coming to work while potentially impaired. Additionally DrugWipe® saliva tests are available (see last page) for the detection of current unfitness to work and drive.

## Drug consumption – Impaired driving and work place safety

Impaired driving or drug consumption in the work place compromises everybody's safety. Few hours after drug consumption drug metabolites are detectable in urine samples. Urine tests are commonly used tools for traffic control applications by police officers. More and more often employers install drug testing programmes for job candidates as well as for routine testing, e.g. forwarding agencies, public transportation organisations.

## Medical applications

Regular unannounced drug tests are carried out during stationary detoxification and ambulant substitution (heroin substitution therapy) to monitor illegal drug consumption additionally to the substitution medication. The proof of additional consumption may lead to exclusion from the therapy or could indicate that closer work is required with the patient.



## How to detect adulteration?

Testing parameter	Manipulation	Origin	Observation
Creatinine/ specific gravity	Dilution	In-vivo: Drinking of water	Urine colour: light-coloured
		In-vitro: Addition of tap water	Specific gravity: < 1.01 g/ml Creatinine: < 30 mg/dl Temperature: < 32 °C
pH value	Addition of acid or alkaline	Cleaning and disinfectant agents: e.g. soap, Domestos, citric acid, acetic acid	Alkaline: pH < 8, chloric odour possible Soap: precipitates possible Acid: pH > 6
Nitrite	Addition of nitrate	Tap water, fertilizer	Increased concentration
Glutaraldehyde	Addition to urine	Cleaning & disinfectant agents	Normally not detectable in urine
Bleaching agent	Addition to urine		
Pyridinium chlorochromate and other oxidant agents	Addition to urine		

## Law enforcement, probation & rehabilitation

Imprisonment does not necessarily stop drug consumption. Within the scope of the medical care demanded, D.TecT® urine tests allow monitoring of drug consumption during imprisonment, probation and rehabilitation.

## Adulteration

In advance of the actual drug test, urine samples should be screened for dilution with water or addition of inhibitory substances to prevent from false positive and negative drug test results. Mostly tap water is used for sample manipulation. Dilution can be achieved in-vivo by drinking considerable amounts of water or in-vitro by adding tap water to the urine sample container. Deviations in the regular specific gravity and creatinine concentration indicate sample dilution. Besides dilution, addition of cleaning and disinfectant agents is a common method of sample manipulation. Their inhibitory substances significantly impact the test performance and are easily accessible. Therefore the pH value is determined in order to detect

addition of acidic or alkaline components. Glutaraldehyde, bleaching and oxidant agents (e.g. pyridinium chlorochromate) are further typical components contained in cleaning agents, affecting the test performance. Increased nitrite values in urine

samples point at storage in unsterile sample containers. Nitrate present in the sample is reduced by bacterial contamination. This degradation of nitrate is not detectable in fresh urine samples.

## D.TecT® cut-off values

Test	Calibrator	Cut-off (ng/ml)
Amphetamine (1.000)	d-Amphetamine	1.000
Amphetamine (500)	d-Amphetamine	500
Amphetamine (300)	d-Amphetamine	300
Barbiturate (300)	Secobarbital	300
Benzodiazepine (300)	Oxazepam	300
Benzodiazepine (200)	Oxazepam	200
Buprenorphine (10)	Buprenorphine	10
Cocaine (300)	Benzoylcegonine	300
Cocaine (150)	Benzoylcegonine	150
Marijuana (150)	11-nor- $\Delta^9$ -THC-9 COOH	150
Marijuana (50)	11-nor- $\Delta^9$ -THC-9 COOH	50
Marijuana (20)	11-nor- $\Delta^9$ -THC-9 COOH	20
Methadone (300)	Methadone	300
EDDP (300)	2-Ethylidine-1,5-Dimethyl-3,3-Diphenylpyrrolidine	300
EDDP (100)	2-Ethylidine-1,5-Dimethyl-3,3-Diphenylpyrrolidine	100
Methamphetamine (1.000)	d-Methamphetamine	1.000
Methamphetamine (500)	d-Methamphetamine	500
Methamphetamine (300)	d-Methamphetamine	300
Methylenedioxyamphetamine (500)	d,l-Methylenedioxyamphetamine	500
Morphine (300)	Morphine	300
Opiate (2.000)	Morphine	2.000
Oxycodone (100)	Oxycodone	100
Phencyclidine (25)	Phencyclidine	25
Propoxyphene (300)	Propoxyphene	300
Tricyclic Antidepressant (1.000)	Nortriptyline	1.000