

LABORATORIO DE SGS ESPAÑOLA DE CONTROL SAU

Accredited by ENAC with file no. 450/EI629

Authorized Metrological Verification 11-OV-0011

**REPORT OF THE RESULTS OF THE TESTS CARRIED OUT ON
BREATHALYZERS, ADTECSO-JUPITER BRAND, MODEL AT-9900,
WITH SERIAL NUMBERS: 80000132, 80000128**

DESCRIPTION:

Breathalyser portable for the determination of the concentration of alcohol in air expired through electrochemical sensor technology.

Parameters technicians declared by manufacturer:

- Range of extent: 0. mg/100mL BAC to 440 mg/100mL BAC
- Step of measure: 0.001 mg/L
- Time of warm-up: < 10 s
- Memory internal: > 65 000 records
- Battery life 2000 test
- Battery Li-ion 7,4 V / 2 000 mAh rechargeable battery
- Working temperature: -10°C to 50°C
- Storage temperature: - 25°C to 70°C
- Printer: Thermal printer



GENERAL:

The tests have been carried out by the SGS LABORATORY according to the procedure PE-S-996-371-OC-15 rev5. This procedure is based on OIML R 126:2012 and ICT 155/2020. The indicated range 0,15 mg/L to 1,5 mg/L.

A test bench, calibrated for the metrological verification of breathalyzer, has been used to generate the different concentrations of alcohol under the following test gas conditions:

- Temperature of the gas: 34 °C ± 0.5 °C
- Humidity relative: 95% ± 5 % (non-condensing)

- Concentration of CO₂: 5 % ± 0.5 %
- Caudal constant

The traceability of the measurements refers to the reference standards of the laboratory, being calibrated periodically, in national and international laboratories, in laboratories accredited by ENAC or by any other entity signatory to the EA Multilateral Agreement for the mutual recognition of certificates.

The indication error (EI) is the difference between the value indicated by the bank and the value indicated by the breathalyzer under test, for a given ethanol concentration in the test gas, in a delivered volume of 1 L ± 0.1 L and a total injection duration of 5 s ± 0.5 s.

Repeatability is obtained from the standard deviation of the five breathalyzer puffs for each concentration of the test gas

RESULTS:

1. Results for the breathalyser, brand AdTecso-Jupiter, model: AT-9900, n/s: 80000134

Date of realization of the trials: 11/09/2024

Conditions environmental:

- Temperature: 23 °C
- Humidity Relative: 41,1 %
- Pressure: 956,1 hPa

RESULTS						
Breathalyser, Brand AdTecso-Jupiter,						
Model AT 9900, n/s: 80000134						
CONDITIONS OF THE BREATH	RESULTS, in mg/L				REQUIREMENTS PE-S-996-371-OC-15 rev 5	
	C_{air_BANK}	C_{air_BREATHALYSER}	EI	Desvt.	 EMP ≤ 0.020 mg/L	Desvt ≤ 0.007 mg/L
Concentration: 0.150 mg/L Volume: 1.0 L Time: 5 s	0.150	0.148	-0.002	0.000	OK	OK
	0.150	0.148	-0.002		OK	
	0.150	0.148	-0.002		OK	
	0.150	0.147	-0.003		OK	
	0.150	0.148	-0.002		OK	

CONDITIONS OF THE BREATH	RESULTS, in mg/L				REQUIREMENTS PE-S-996-371-OC-15 rev 5	
	C_{air_BANK}	C_{air_BREATHALYSER}	EI	Desvt.	 EMP ≤ 0.020 mg/L	Desvt ≤ 0.007 mg/L
Concentration: 0.250 mg/L Volume: 1.0 L Time: 5 s	0.250	0.249	-0.001	0.004	OK	OK
	0.250	0.249	-0.001		OK	
	0.250	0.248	-0.002		OK	
	0.250	0.242	-0.008		OK	
	0.250	0.242	-0.008		OK	

CONDITIONS OF THE BREATH	RESULTS, in mg/L				REQUIREMENTS PE-S-996-371-OC-15 rev 5	
	C _{air_BANK}	C _{air_BREATHALYSER}	EI	Desvt.	EMP ≤ 0.030 mg/L	Dev _t ≤ 0.010 mg/L
Concentration: 0.600 mg/L Volume: 1.0 L Time: 5 s	0.600	0.569	-0.021	0.005	OK	OK
	0.600	0.588	-0.012		OK	
	0.600	0.590	-0.010		OK	
	0.600	0.589	-0.011		OK	
	0.600	0.592	-0.008		OK	

CONDITIONS OF THE BREATH	RESULTS, in mg/L				REQUIREMENTS PE-S-996-371-OC-15 rev 5	
	C _{air_BANK}	C _{air_BREATHALYSER}	EI	Desvt.	EMP ≤ 0.047 mg/L	Dev _t ≤ 0.015 mg/L
Concentration: 0.950 mg/L Volume: 1.0 L Time: 5 s	0.950	0.928	-0.022	0.005	OK	OK
	0.950	0.925	-0.025		OK	
	0.950	0.922	-0.028		OK	
	0.950	0.920	-0.030		OK	
	0.950	0.915	-0.035		OK	

CONDITIONS OF THE BREATH	RESULTS, in mg/L				REQUIREMENTS PE-S-996-371-OC-15 rev 5	
	C _{air_BANK}	C _{air_BREATHALYSER}	EI	Desvt.	EMP ≤ 0.075 mg/L	Dev _t ≤ 0.025 mg/L
Concentration: 1,5 0mg/L Volume: 1.0 L Time: 5 s	1.500	1.461	-0,039	0.020	OK	OK
	1.500	1.471	-0.029		OK	
	1.500	1.473	-0.027		OK	
	1.500	1.486	-0.014		OK	
	1.500	1.512	0.012		OK	

2. Results for the breathalyser, brand AdTecso-Jupiter, model: AT-9900, n/s: 80000128

Date of realization of the trials: 11/09/2024

Conditions environmental:

- Temperature: 23,1 °C
- Humidity Relative: 40,5 %
- Pressure: 946,2 hPa

RESULTS						
Breathalyser, Brand AdTecso-Jupiter,						
Model AT 9900, n/s: 80000128						
CONDITIONS OF THE BREATH	RESULTS, in mg/L				REQUIREMENTS PE-S-996-371-OC-15 rev 5	
	C _{air_BANK}	C _{air_BREATHALYSER}	EI	Desvt.	EMP ≤ 0.020 mg/L	Desvt ≤ 0.007 mg/L
Concentration: 0.150 mg/L Volume: 1.0 L Time: 5 s	0.150	0.153	-0.003	0.002	OK	OK
	0.150	0.150	0.00		OK	
	0.150	0.148	-0.002		OK	
	0.150	0.148	-0.002		OK	
	0.150	0.148	-0.002		OK	

CONDITIONS OF THE BREATH	RESULTS, in mg/L				REQUIREMENTS PE-S-996-371-OC-15 rev 5	
	C _{air_BANK}	C _{air_BREATHALYSER}	EI	Desvt.	EMP ≤ 0.020 mg/L	Dev _t ≤ 0.007 mg/L
Concentration: 0.250 mg/L Volume: 1.0 L Time: 5 s	0.250	0.238	-0.012	0.002	OK	OK
	0.250	0.243	-0.007		OK	
	0.250	0.243	-0.007		OK	
	0.250	0.242	-0.008		OK	
	0.250	0.244	-0.006		OK	

CONDITIONS OF THE BREATH	RESULTS, in mg/L				REQUIREMENTS PE-S-996-371-OC-15 rev 5	
	C _{air_BANK}	C _{air_BREATHALYSER}	EI	Desvt.	EMP ≤ 0.030 mg/L	Dev _t ≤ 0.010 mg/L
Concentration: 0.600 mg/L Volume: 1.0 L Time: 5 s	0.600	0.577	-0.023	0.004	OK	OK
	0.600	0.582	-0.018		OK	
	0.600	0.584	-0.016		OK	
	0.600	0.587	-0.013		OK	
	0.600	0.580	-0.020		OK	

CONDITIONS OF THE BREATH	RESULTS, in mg/L				REQUIREMENTS PE-S-996-371-OC-15 rev 5	
	C _{air_BANK}	C _{air_BREATHALYSER}	EI	Desvt.	EMP ≤ 0.047 mg/L	Dev _t ≤ 0.015 mg/L
Concentration: 0.950 mg/L Volume: 1.0 L Time: 5 s	0.950	0.981	-0.031	0.003	OK	OK
	0.950	0.983	-0.033		OK	
	0.950	0.983	-0.033		OK	
	0.950	0.980	-0.030		OK	
	0.950	0.975	-0.025		OK	

CONDITIONS OF THE BREATH	RESULTS, in mg/L				REQUIREMENTS PE-S-996-371-OC-15 rev 5	
	C _{air_BANK}	C _{air_BREATHALYSER}	EI	Desvt.	EMP ≤ 0.075 mg/L	Dev _t ≤ 0.025 mg/L
Concentration: 1,50 mg/L Volume: 1.0 L Time: 5 s	1.500	1.450	-0,050	0.027	OK	OK
	1.500	1.467	-0.033		OK	
	1.500	1.483	-0.017		OK	
	1.500	1.522	0.022		OK	
	1.500	1.490	-0.010		OK	

In Ciudad Real on September 11, 2024

SGS Laboratory

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