UTAC CERAM

EUROPE 2 SACS BVA
CE3_20181012_003

Calculation Reference

Regulation ---------- EC
Ref. Temp. ---------- 273.15 K
Test Options ---------- ,BAG,,CONTIDIL,,,,CVS,,MODAL,PMSAM,TUNNEL,,Bag_THC SPCS,,,,ZSBAGCERT,ZSDIL,,,,,,
Calc. Options ---------- EU6c, Gasoline, - , - , - , - , - , - , -
Ref. Pressure ---------- 1013.3 mbar

Date---------- 10/12/18

Bon pour validation,
daté du :
12/10/2018
THIRIET Thomas

Vehicle Data

ID Vehicle ---------- **18_225**
Mark/Model ---------- **GOLF VII**
Test Description ---------- EUROPE_2_SACS_BVA.TD
Odometer (before test) ---------- 12582 km
Odometer (after test) ---------- 12593 km

Judgement

Regulation----------
THC limit ----------
CO limit ----------
NOX limit ----------
HC+NOX limit -------
PM limit ----------

Dyno data

Inertia ---------- 1,360 kg
Dyno Load - A / B / C ---------- 7.1 / 0.000 / 0.0481 (N / N/(km/h) / N/(km/h)²)

Remarks

Pretest ---------- NEDC E10 sans kit
Température huile à 21.5°C
Tension batterie à 12.50V
Posttest ---------- RAS

Fuel data

Fuel ---------- E10
Fuel Type ---------- Gasoline
Density ---------- 0.748 kg/l
CWF ---------- 83.2 %
NHV ---------- 17,747 btu/lb

Responsibles

Driver ---------- THIRIET Thomas
Cell Manager ------- THIRIET Thomas
Project Manager --- FLEURY Yoan

Phase results

	HC	CO	CO2	NOx	NMHC	CH4	FE	PM	PN
Phase 1	[mg/km]	[mg/km]	[g/km]	[mg/km]	[mg/km]	[mg/km]	[lp100km]	[mg/km]	[1/km]
bag	92,241	450,736	169,945	43,917	78,640	15,057	7,48		2,46E+12
modal	89,382	467,458	173,963	43,523	86,174	3,551	7,66		
Phase 2	[mg/km]	[mg/km]	[g/km]	[mg/km]	[mg/km]	[mg/km]	[lp100km]	[mg/km]	[1/km]
bag	2,648	49,014	124,044	3,411	1,529	1,239	5,44		2,24E+12
modal	2,090	57,158	126,854	3,399	2,050	0,045	5,56		
	[mg/km]	[mg/km]	[g/km]	[mg/km]	[mg/km]	[mg/km]	[lp100km]	[mg/km]	[1/km]
bag									
modal									
	[mg/km]	[mg/km]	[g/km]	[mg/km]	[mg/km]	[mg/km]	[lp100km]	[mg/km]	[1/km]
bag									
modal									

Judgement in mg/km	NMHC + NOx	HC+NOx
	48,51451701	54,26

Total results

	HC	CO	CO2	NOx	NMHC	CH4	FE	PM	PN
	[mg/km]	[mg/km]	[g/km]	[mg/km]	[mg/km]	[mg/km]	[lp100km]	[mg/km]	[1/km]
Bag	35,840	197,843	141,049	18,418	30,097	6,358	6,19		2,32E+12
dilute	34,430	209,165	144,307	18,264	33,216	1,344	6,34		
modal									

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HC+NOX limit ---------
PM limit ----------

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Fuel Type ---------- Gasoline
Density ---------- 0.748 kg/l
CWF ---------- 83.2 %
NHV ---------- 17,747 btu/lb

Responsibles

Driver ---------- THIRIET Thomas
Cell Manager ---------- THIRIET Thomas
Project Manager ----- FLEURY Yoan

Phase Results	**1**	**2**			**Unit**
Barometric Pressure	99,80	99,80			kpa
Ambient Temp.	22,17	23,20			°C
Absolut Humidity	8,31	8,56			g/kg
Releative Humidity	49,48	47,85			%
NOx Correction Factor	0,93	0,93			
Dilution Factor	36,689	16,366			
CVS Volume	110,039	56,337			m3@0
Average CVS Temperature	23,65	24,37			°C
Average CVS Pressure	983,70	983,51			mbar
Mileage	4,069	6,914			km
Drivers Violation	0,1	0,0			sec
Total Error Count	1,0	0,0			
Total Error Count within Violation Time Tolerance	0,0	0,0			

Bag Analysis	**1**	**2**			**Unit**
Concentration Samp. Bag THC	8,417	3,713			ppmc1
Concentration Amb. Bag THC	3,217	3,418			ppmc1
Corrected Bag Concentration THC	5,288	0,504			ppmc1
Emission THC	0,375	0,018			g
Emission THC per mileage	**92,241**	**2,648**			**mg/km**
Concentration Samp. Bag CH4	2,647	2,004			ppm
Concentration Amb. Bag CH4	1,920	1,908			ppm
Corrected Bag Concentration CH4	0,780	0,213			ppm
Emission CH4	0,061	0,009			g
Emission CH4 per mileage	**15,057**	**1,239**			**mg/km**
Concentration Samp. Bag NMHC					ppmc1
Concentration Amb. Bag NMHC					ppmc1
Corrected Bag Concentration NMHC	4,508	0,291			ppmc1
Emission NMHC	0,320	0,011			g
Emission NMHC per mileage	**78,640**	**1,529**			**mg/km**
Concentration Samp. Bag CO	13,368	4,812			ppm
Concentration Amb. Bag CO	0,036	-0,408			ppm
Corrected Bag Concentration CO	13,333	4,812			ppm
Emission CO	1,834	0,339			g
Emission CO per mileage	**450,736**	**49,014**			**mg/km**
Concentration Samp. Bag NOx	0,863	0,223			ppm
Concentration Amb. Bag NOx	0,009	0,004			ppm
Corrected Bag Concentration NOx	0,855	0,219			ppm
Emission NOx	0,179	0,024			g
Emission NOx per mileage	**43,917**	**3,411**			**mg/km**
Concentration Samp. Bag CO2	0,363	0,818			%
Concentration Amb. Bag CO2	0,044	0,046			%
Corrected Bag Concentration CO2	0,320	0,775			%
Emission CO2	691,473	857,616			g
Emission CO2 per mileage	**169,945**	**124,044**			**g/km**
Fuel Economy	7,48	5,44			lp100km

Total Results

Emission per	HC	HC + NOx	NMHC	CO	NOx	CO2
Total mileage in mg/km	35,840	54,258	30,097	197,843	18,418	141,049
Judgement in mg/km						
		NMHC + NOx		CH4		
Fuel Economy in lp100km	6,19	48,515		6,358		

Particulate emission

Gram Emission		g	Counts	2,55E+13	#
Emission per mileage		**mg/km**	**Counts/mileage**	**2,32E+12**	**1/km**

Bag Measurement Phase 1

	HC	CO	CO2	NOx	CH4
	ppmC1	ppm	%	ppm	ppm
Sniff Value	8,42	12,73	0,36	0,85	2,60
Range Sniff	100,0	200,0	2,0	50,0	50,0
Spangas Spec	91,770	92,200	1,822	8,090	45,000
Range Spangas	100,0	200,0	2,0	50,0	50,0
Zerogas Conc	0,003	-0,140	0,000	0,000	0,000
Deviation [%]	0,003	-0,070	-0,004	0,001	0,001
Spangas Conc	91,740	92,223	1,822	8,085	45,011
Deviation [%]	-0,030	0,011	0,020	-0,009	0,022
Zerogas Conc	-0,008	0,102	0,000	0,005	0,000
Deviation [%]	-0,011	0,121	0,121	0,009	-0,002
Sample Bag	**8,42**	**13,37**	**0,36**	**0,86**	**2,65**
Ambient Bag	**3,22**	**0,04**	**0,04**	**0,01**	**1,92**
Zerogas Conc	-0,024	-0,340	0,000	0,000	0,001
Deviation [%]	-0,027	-0,100	0,019	-0,001	0,000
Spangas Conc		92,608	1,824	8,088	45,098
Deviation [%]		0,193	0,098	0,006	0,174

Bag Filltime: 780.0 sec Crankduration: 0.0 sec Start of analysis after 0.0 min

Bag Measurement Phase 2

	HC	CO	CO2	NOx	CH4
	ppmC1	ppm	%	ppm	ppm
Sniff Value	3,72	5,16	0,82	0,23	2,02
Range Sniff	100,0	200,0	2,0	50,0	50,0
Spangas Spec	91,770	92,200	1,822	8,090	45,000
Range Spangas	100,0	200,0	2,0	50,0	50,0
Zerogas Conc	0,008	-0,138	0,000	0,001	-0,001
Deviation [%]	0,008	-0,069	0,010	0,001	-0,001
Spangas Conc	91,748	92,251	1,822	8,091	45,088
Deviation [%]	-0,022	0,026	0,000	0,001	0,176
Zerogas Conc	-0,001	-0,104	0,000	0,000	0,001
Deviation [%]	-0,009	0,017	0,017	0,000	0,003
Sample Bag	**3,71**	**4,81**	**0,82**	**0,22**	**2,00**
Ambient Bag	**3,42**	**-0,41**	**0,05**	**0,00**	**1,91**
Zerogas Conc	0,008	-0,726	0,000	-0,004	0,000
Deviation [%]	0,000	-0,294	-0,007	-0,008	0,001
Spangas Conc		92,101	1,822	8,079	44,857
Deviation [%]		-0,075	-0,008	-0,024	-0,462

Bag Filltime: 400.0 sec Start of analysis after 10.4 min

Bag Measurement Phase

	HC	CO	CO2	NOx	CH4
	ppmC1	ppm	%	ppm	ppm
Sniff Value					
Range Sniff					
Spangas Spec					
Range Spangas					
Zerogas Conc					
Deviation [%]					
Spangas Conc					
Deviation [%]					
Zerogas Conc					
Deviation [%]					
Sample Bag					
Ambient Bag					
Zerogas Conc					
Deviation [%]					
Spangas Conc					
Deviation [%]					

Bag Filltime: sec Start of analysis after min

Bag Measurement Phase

	HC	CO	CO2	NOx	CH4
	ppmC1	ppm	%	ppm	ppm
Sniff Value					
Range Sniff					
Spangas Spec					
Range Spangas					
Zerogas Conc					
Deviation [%]					
Spangas Conc					
Deviation [%]					
Zerogas Conc					
Deviation [%]					
Sample Bag					
Ambient Bag					
Zerogas Conc					
Deviation [%]					
Spangas Conc					
Deviation [%]					

Bag Filltime: sec Start of analysis after min

Time Control

Testbegin 2:47:19 PM Testend 4:01:41 PM

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Phase Results	1	2			Unit
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NOx Correction Factor	0,93	0,93			
Dilution Factor	36,689	16,366			
CVS Volume	110,039	56,337			m3@0
Average CVS Temperature	23,65	24,37			°C
Average CVS Pressure	983,70	983,51			mbar
max. Tunnel Temperature	24,10	29,70			°C
PMU Volume	0,366	0,187			m3@0
Mileage	4,069	6,914			km
Drivers Violation	0,1	0,0			sec

Particulate Results	1	2			Unit
Main filter before test					mg
Main filter after test					mg
Backup filter before test					mg
Backup filter after test					mg
Payload main filter					mg
Payload backup filter					mg
Efficiency of main filter					%
Calculated payload					mg
Mass emission					mg
Mass emission per mileage					mg/km

Buoyancy

Cabinet Temperature	0,0	0,0			°C
Barometric pressure	0,0	0,0			kPa
Cabinet Humidity	0,0	0,0			%
Filter medium density	0,0	0,0			kg/m3
Weight density	0,0	0,0			kg/m3

Particulate emission

Gram Emission		mg
Emission per mileage		**mg/km**

Particulate Counts

Counts/Phase	1,00E+13	1,55E+13			#
Total	**2,55E+13**	#			
Counter DF (PND1)	100				
Counter DF (PND2)	15				
Counts/mileage	2,46E+12	2,24E+12			1/km
Total	**2,32E+12**	1/km			