

# Inspectorate Española, S.A.

(Unipersonal)

Laboratorio de análisis - Cartagena

Polígono Industrial El Fongal Ctra -343 km10 Deha

Valle de Escornbreras (MURCIA)

Tel. : 671395671

C.I.F. : A 28633600



**BUREAU  
VERITAS**

## ANALYTICAL REPORT

Job No: 17116-1  
o/Ref: ES00CJ19003795

Date of Reception: 29/10/2019  
Date Analysis started: 29/10/2019  
Date Analysis completed: 30/10/2019

Label: BUREAU VERITAS  
Lab ID: TK 211

Sample Package: 1x1L CAN  
Seal N°: 172431

*Information provided by the customer, the sample owner or the taker*

Grade: GASOLINE 95  
Origin: Terminales Canarias - Tenerife  
Id: HAFNIA KARAVA  
Shoretank 211 composite sample taken after discharge

Y/Ref: T1119211  
Sampling date: 22/10/2019

Test	Units	Method	Results	Specifications <sup>1</sup>	U K=2 (95%)	Notes*
Density at 15 °C	Kg/m3	ASTM D-4052:18	739,8	720-775		
DVPE	KPa	EN ISO 13016-1:18	66	50-80		
Distillation		ASTM D-86:18				
Evap at 70°C	%vol		30,6	20-54		
Evap at 100°C	%vol		58,0	46-74		
Evap at 150°C	%vol		93,6	min 75		
FBP	°C		176,2	max 210		
Residue	%vol		1,0	max 2,0		
Sulphur	mg/Kg	EN ISO 20846:12	7,4	max 10,0		
Lead content	g/L	ASTM D-3237:17	0,005	max 0,005		
Copper Corrosion 3H 50 °C		ASTM D-130:19	1b	Class 1		
Existent Gums (washed)	mg/100ml	ASTM D-381:12 (Rev2017)	2	max 5		
Total contamination	mg/Kg	EN ISO 12662:14	<6	-		

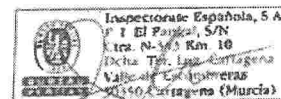
The test results shown on this report affect only to the samples received in this laboratory, and not necessarily to the whole from which these samples were drawn.

<sup>1</sup> Specifications: GASOLINAS SGC/SGA/SGP OPS REVISION 7 Fecha 28/04/15

Precision parameters apply in the evaluation of the test results specified above. Please also refer to ASTM D3244 (Except for RFG), IP 367 and appendix E of IP standard methods for analysis and testing in respect to the utilization of test data to determine conformance with the specifications.

The samples will be kept for a period of three months.

Date of Report: 31/10/2019  
Name/s: Itziar Martinez Larrambeberre  
Signature/s:





**Cartagena Laboratory**

Calle Riga nº 11, 30353 Cartagena (Murcia).  
Telephone: +34 868 06 71 42, E-mail: cartagena.lab@amspecgroup.com  
CIF : B72083769

**ANALYTICAL REPORT**

Job Number: 380-4  
O/ Ref: 647-19-00036  
Y/ Ref: N/A  
Grade: GNA 98  
Origin: TERMINALES CANARIOS, TENERIFE  
Label: AMSPEC  
Identification: SHT 312: T0719312 MT " CIELO DI GAETA"  
Description: RUNNING SAMPLE BEFORE LOADING

Date of reception: 31/10/2019  
Date Analysis started: 31/10/2019  
Date Analysis completed: 31/10/2019  
Sample Package: 2X1L CAN  
Sampling date: 28/10/2019  
Seal Nº: N/A

Parameter	Units	Method	Result	Note
Density at 15°C	g/ml	ISO 12185:1996/Cor.1:2001(E)	0,7406	
DVPE	Kpa	EN ISO 13016-1:2008	58,3	
Distillation		ASTM D86 - 16a		
Evap at 70°C	%Vol		37,3	
Evap at 100°C	%Vol		63,6	
Evap at 150°C	%Vol		95,2	
FBP	°C		177,5	
Residue	%Vol		1,0	
Sulphur	mg/Kg	EN ISO 20846:2011	6,6	
Lead Content	g/L	ASTM D 3237 - 17	<0,005	
Copper corrosion, 3h 50°C	Class 1	ASTM D130 - 12	1a	
Existent Gums (Washed)	mg/100ml	ASTM D 381 - 12(2017)	<1	
Total Contamination	mg/Kg	EN ISO 12662:2014	<1	

The test results shown on this report affect only to the samples received in this laboratory, and not necessarily to the whole from which these samples were. Precision parameters apply in the evaluation of the test results specified above. Please also refer to ASTM D3244 (Except for RFG), IP 367 and appendix E of IP standard methods for analysis and testing in respect to the utilization of test data to determine conformance with the specifications. The samples will be kept for a period of three months.

Date of Report 31/10/2019  
Name/s Ana Belén Sánchez  
Signature/s Chief Analyst

AmSpec Iberia S.L.  
C/Oceano Financiero  
Parque Empresarial "Los Hornos"  
11379 Los Barrios (Cádiz, Spain)



Cartagena Laboratory  
Calle Riga nº 11, 30353 Cartagena (Murcia).  
Telephone: +34 868 06 71 42 E-mail: cartagena.lab@amspecgroup.com  
CIF : B72083769

## ANALYTICAL REPORT


Job Number: 380-1  
O/ Ref: 647-19-00036  
Y/ Ref: N/A  
Grade: GNA 95  
Origin: TERMINALES CANARIOS, TENERIFE  
Label: AMSPEC  
Identification: SHT 211 : T1219211 MT " CIELO DI GAETA"  
Description: RUNNING SAMPLE

Date of reception: 31/10/2019  
Date Analysis started: 31/10/2019  
Date Analysis completed: 31/10/2019  
Sample Package: 2X1L CAN  
Sampling date: 28/10/2019  
Seal Nº: N/A

Parameter	Units	Method	Result	Note
Density at 15°C	g/ml	ISO 12185:1996/Cor.1:2001(E)	0,7339	
DVPE	Kpa	EN ISO 13016-1:2008	60,8	
Distillation		ASTM D86 - 16a		
Evap at 70°C	%Vol		35,4	
Evap at 100°C	%Vol		61,9	
Evap at 150°C	%Vol		94,4	
FBP	°C		175,3	
Residue	%Vol		1,0	
Sulphur	mg/Kg	EN ISO 20846:2011	6,9	
Lead Content	g/L	ASTM D 3237 - 17	<0,005	
Copper corrosion, 3h 50°C	Class 1	ASTM D130 - 12	1a	
Existent Gums (Washed)	mg/100ml	ASTM D 381 - 12(2017)	<1	
Total Contamination	mg/Kg	EN ISO 12662:2014	1,3	

The test results shown on this report affect only to the samples received in this laboratory, and not necessarily to the whole from which these samples were Precision parameters apply in the evaluation of the test results specified above. Please also refer to ASTM D3244 (Except for RFG), IP 367 and appendix E of IP standard methods for analysis and testing in respect to the utilization of test data to determine conformance with the specifications.  
The samples will be kept for a period of three months.

Date of Report 31/10/2019  
Name/s Ana Belén Sánchez  
Signature/s Chief Analyst

  
AmSpec Iberia S.L.  
C/Oleata, Ronda  
Parque Empresarial Las Matronas  
11378 Los Barros (Cádiz, Spain)



**Cartagena Laboratory**

Calle Riga nº 11, 30353 Cartagena (Murcia).  
Telephone: +34 868 06 71 42 E-mail: cartagena.lab@amspecgroup.com  
CIF : B72083769

**ANALYTICAL REPORT**

Job Number: 380-2

O/ Ref: 647-19-00036

Y/ Ref: N/A

Grade: GNA 95

Origin: TERMINALES CANARIOS, TENERIFE

Label: AMSPEC

Identification: SHT 212: T0919212 MT "CIELO DI GAETA"

Description: RUNNING SAMPLE BEFORE LOADING

Date of reception: 31/10/2019

Date Analysis started: 31/10/2019

Date Analysis completed: 31/10/2019

Sample Package: 2X1L CAN

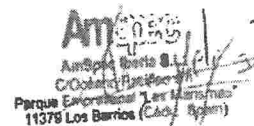
Sampling date: 28/10/2019

Seal Nº: N/A

Parameter	Units	Method	Result	Note
Density at 15°C	g/ml	ISO 12185:1996/Cor.1:2001(E)	0,7287	
DVPE	Kpa	EN ISO 13016-1:2008	59,0	
Distillation		ASTM D86 - 16a		
Evap at 70°C	%Vol		37,7	
Evap at 100°C	%Vol		65,5	
Evap at 150°C	%Vol		95,4	
FBP	°C		172,4	
Residue	%Vol		1,2	
Sulphur	mg/Kg	EN ISO 20846:2011	7,4	
Lead Content	g/L	ASTM D 3237 - 17	<0,005	
Copper corrosion, 3h 50°C	Class 1	ASTM D130 - 12	1a	
Existent Gums (Washed)	mg/100ml	ASTM D 381 - 12(2017)	<1	
Total Contamination	mg/Kg	EN ISO 12662:2014	2,2	

The test results shown on this report affect only to the samples received in this laboratory, and not necessarily to the whole from which these samples were Precision parameters apply in the evaluation of the test results specified above. Please also refer to ASTM D3244 (Except for RFG), IP 367 and appendix E of IP standard methods for analysis and testing in respect to the utilization of test data to determine conformance with the specifications.  
The samples will be kept for a period of three months.

Date of Report 31/10/2019  
Name/s Ana Belén Sánchez  
Signature/s Chief Analyst





**Cartagena Laboratory**

Calle Riga nº 11, 30353 Cartagena (Murcia).  
Telephone: +34 868 06 71 42 E-mail: cartagena.lab@amspecgroup.com  
CIF : B72083769

**ANALYTICAL REPORT**

**Job Number:** 380-3

**O/ Ref:** 647-19-00036

**Y/ Ref:** N/A

**Grade:** GNA 98

**Origin:** TERMINALES CANARIOS, TENERIFE

**Label:** AMSPEC

**Identification:** SHT 311: T1119311 MT " CIELO DI GAETA"

**Description:** RUNNING SAMPLE BEFORE LOADING

**Date of reception:** 31/10/2019

**Date Analysis started:** 31/10/2019

**Date Analysis completed:** 31/10/2019

**Sample Package:** 2X1L CAN


**Sampling date:** 28/10/2019

**Seal Nº:** N/A

Parameter	Units	Method	Result	Note
Density at 15°C	g/ml	ISO 12185:1996/Cor.1:2001(E)	0,7413	
DVPE	Kpa	EN ISO 13016-1:2008	57,6	
Distillation		ASTM D86 - 16a		
Evap at 70°C	%Vol		37,1	
Evap at 100°C	%Vol		63,5	
Evap at 150°C	%Vol		95,2	
FBP	°C		175,0	
Residue	%Vol		1,0	
Sulphur	mg/Kg	EN ISO 20846:2011	6,4	
Lead Content	g/L	ASTM D 3237 - 17	<0,005	
Copper corrosion, 3h 50°C	Class 1	ASTM D130 - 12	1a	
Existent Gums (Washed)	mg/100ml	ASTM D 381 - 12(2017)	<1	
Total Contamination	mg/Kg	EN ISO 12662:2014	1,2	

The test results shown on this report affect only to the samples received in this laboratory, and not necessarily to the whole from which these samples were Precision parameters apply in the evaluation of the test results specified above. Please also refer to ASTM D3244 (Except for RFG), IP 367 and appendix E of IP standard methods for analysis and testing in respect to the utilization of test data to determine conformance with the specifications.  
The samples will be kept for a period of three months.

Date of Report 31/10/2019  
Name/s Ana Belén Sánchez  
Signature/s Chief Analyst

  
AmSpec Iberia S.L.  
C. Ciudad de Huelva s/n  
P.O. Box 11379 Los Barrios I Cadiz Spain

Authorized by Alvaro Escolar  
Laboratory Manager



**Cartagena Laboratory**

Calle Riga nº 11, 30353 Cartagena (Murcia).  
Telephone: +34 868 06 71 42 E-mail: cartagena.lab@amspecgroup.com  
CIF : B72083769

**ANALYTICAL REPORT**

Job Number: 380-5

O/ Ref: 647-19-00036

Y/ Ref: N/A

Grade: GOA

Origin: TERMINALES CANARIOS, TENERIFE

Label: AMSPEC

Identification: SHT 101: T0719101 MT " CIELO DI GAETA"

Description: RUNNING SAMPLE AFTER DISCHARGE

Date of reception: 31/10/2019

Date Analysis started: 31/10/2019

Date Analysis completed: 31/10/2019

Sample Package: 2X1L CAN

Sampling date: 28/10/2019

Seal Nº: N/A

Parameter	Units	Method	Result	Note
Density at 15°C	g/ml	ISO 12185:1996/Cor.1:2001(E)	0,8391	
Viscosity at 40°C	mm <sup>2</sup> /s	ISO 3104:1994/Cor.1:1997(E)	2,672	
Sulphur content	mg/Kg	ISO 20846:2011	8,1	
Distillation	°C	ASTM D86 - 16a		
65% Recovered			295,7	
85% Recovered			323,5	
95% Recovered			350,5	
F.B.P.			362,2	
Flash point (Proced. A - Electric ignitor)	°C	ISO 2719:2002(E)	58	
Water Karl Fischer	mg/Kg	ISO 12937:2000(E)	96	
Copper corrosion, 3h 50°C	Class 1	ASTM D130 - 12	1a	
Conductivity at 20°C	ps/m	ASTM D2624 - 15	64	
FAME content	%vol	EN 14078:2010	6,5	
CFPP	°C	UNE-EN 116:2015	-15	

The test results shown on this report affect only to the samples received in this laboratory, and not necessarily to the whole from which these samples were Precision parameters apply in the evaluation of the test results specified above. Please also refer to ASTM D3244 (Except for RFG), IP 367 and appendix E of IP standard methods for analysis and testing in respect to the utilization of test data to determine conformance with the specifications.  
The samples will be kept for a period of three months.

Date of Report 31/10/2019  
Name/s Ana Belén Sánchez  
Signature/s Chief Analyst

AmSpec Norte S.L.  
C/Olefinas Plus (Barrios)  
Parque Empresarial Las Manzanas  
11370 Los Barrios (Cádiz, Spain)