

INFORME DE ENSAYO / TEST REPORT

2023AN6064

FECHA DE RECEPCIÓN / DATE OF RECEPTION
17/02/2023

SOLICITANTE / APPLICANT

FECHA DE ENSAYOS / DATE TESTS
Inicio / Starting: 24/02/2023
Finalización / Ending: 10/03/2023

GABRIEL A/S
HULMAGERVEJ 55
DK-9000 Ålborg

Att. BENTE ELLINGSOE

IDENTIFICACIÓN Y DESCRIPCIÓN DE LAS MUESTRAS / IDENTIFICATION AND DESCRIPTION OF SAMPLES

REFERENCIAS / REFERENCES
01.Art. Renewed Loop/ Renewed Loop Screen 60338 Grey
02.Art. Renewed Loop/ Renewed Loop Screen 60339 Grey
03.Art. Renewed Loop/ Renewed Loop Screen 60340 Dark Grey
04.Art. Renewed Loop/ Renewed Loop Screen 60341 Dark Grey
05.Art. Renewed Loop/ Renewed Loop Screen 60999 Black
06.Art. Renewed Loop/ Renewed Loop Screen 61280 Beige
07.Art. Renewed Loop/ Renewed Loop Screen 61281 Dark Beige
08.Art. Renewed Loop/ Renewed Loop Screen 61282 Dark Beige
09.Art. Renewed Loop/ Renewed Loop Screen 60342 Dark Grey
10.Art. Renewed Loop/ Renewed Loop Screen 61283 Brown
11.Art. Renewed Loop/ Renewed Loop Screen 61284 Dark Brown
12.Art. Renewed Loop/ Renewed Loop Screen 61285 Dark Brown
13.Art. Renewed Loop/ Renewed Loop Screen 63131 Orange
14.Art. Renewed Loop/ Renewed Loop Screen 63132 Dark Orange
15.Art. Renewed Loop/ Renewed Loop Screen 68283 Yellow Green
16.Art. Renewed Loop/ Renewed Loop Screen 68284 Yellow Green
17.Art. Renewed Loop/ Renewed Loop Screen 68285 Yellow Green
18.Art. Renewed Loop/ Renewed Loop Screen 68286 Dark Green
19.Art. Renewed Loop/ Renewed Loop Screen 68287 Green
20.Art. Renewed Loop/ Renewed Loop Screen 68288 Yellow Green
21.Art. Renewed Loop/ Renewed Loop Screen 68289 Dark Yellow Green
22.Art. Renewed Loop/ Renewed Loop Screen 62140 Green Yellow
23.Art. Renewed Loop/ Renewed Loop Screen 62141 Dark Green Yellow
24.Art. Renewed Loop/ Renewed Loop Screen 63133 Light Orange
25.Art. Renewed Loop/ Renewed Loop Screen 63134 Orange
26.Art. Renewed Loop/ Renewed Loop Screen 63135 Dark Orange
27.Art. Renewed Loop/ Renewed Loop Screen 64262 Red
28.Art. Renewed Loop/ Renewed Loop Screen 64263 Red
29.Art. Renewed Loop/ Renewed Loop Screen 64264 Dark Red
30.Art. Renewed Loop/ Renewed Loop Screen 66254 Blue

Los ensayos marcados con * no están amparados por la acreditación de ENAC.
Tests marked with * are not included within the scope of the ENAC accreditation.

Rev.2 Esta revisión anula y sustituye a la anterior / This revision cancels and replaces the previous
Error en la referencia
Reference error





31.Art. Renewed Loop/ Renewed Loop Screen 66255 Blue
32.Art. Renewed Loop/ Renewed Loop Screen 66256 Dark Blue
33.Art. Renewed Loop/ Renewed Loop Screen 66257 Dark Blue
34.Art. Renewed Loop/ Renewed Loop Screen 66258 Green Blue
35.Art. Renewed Loop/ Renewed Loop Screen 66259 Green Blue
36.Art. Renewed Loop/ Renewed Loop Screen 66260 Dark Green Blue
37.Art. Renewed Loop/ Renewed Loop Screen 66261 Dark Green Blue
38.Art. Renewed Loop/ Renewed Loop Screen 67131 Turquoise
39.Art. Renewed Loop/ Renewed Loop Screen 67132 Turquoise
40.Art. Renewed Loop/ Renewed Loop Screen 67133 Dark Turquoise
41.Art. Renewed Loop/ Renewed Loop Screen 68290 Blue Green
42.Art. Renewed Loop/ Renewed Loop Screen 68291 Blue Green
43.Art. Renewed Loop/ Renewed Loop Screen 68292 Blue Green
44.Art. Renewed Loop/ Renewed Loop Screen 68293 Dark Blue Green
45.Art. Renewed Loop/ Renewed Loop Screen 68294 Green
46.Art. Renewed Loop/ Renewed Loop Screen 68295 Dark Green
47.Art. Renewed Loop/ Renewed Loop Screen 68296 Dark Green

ENSAYOS REALIZADOS / TESTS CARRIED OUT

- SOLIDEZ DE LAS TINTURAS A LA LUZ / COLOUR FASTNESS TO ARTIFICIAL LIGHT.



RESULTADOS / RESULTS

SOLIDEZ DE LAS TINTURAS A LA LUZ COLOUR FASTNESS TO ARTIFICIAL LIGHT

Norma
Standard

EN ISO 105-B02:2014. Método 2
EN ISO 105-B02:2014. Method 2

Aparato
Apparatus

Xenotest 440 02423E06

Condiciones de exposición
Exposure conditions

Normales
Normal

Condiciones de evaluación
Evaluation conditions

Cámara de luces Gretagmacbeth (02021N06)
Light camera Gretagmacbeth (02021N06)

Referencia <i>Reference</i>	Índice de solidez <i>Light fastness</i>
01.Art. Renewed Loop/ Renewed Loop Screen 60338 Grey	8
02.Art. Renewed Loop/ Renewed Loop Screen 60339 Grey	8
03.Art. Renewed Loop/ Renewed Loop Screen 60340 Dark Grey	8
04.Art. Renewed Loop/ Renewed Loop Screen 60341 Dark Grey	8
05.Art. Renewed Loop/ Renewed Loop Screen 60999 Black	8
06.Art. Renewed Loop/ Renewed Loop Screen 61280 Beige	8
07.Art. Renewed Loop/ Renewed Loop Screen 61281 Dark Beige	8
08.Art. Renewed Loop/ Renewed Loop Screen 61282 Dark Beige	8
09.Art. Renewed Loop/ Renewed Loop Screen 60342 Dark Grey	8
10.Art. Renewed Loop/ Renewed Loop Screen 61283 Brown	8
11.Art. Renewed Loop/ Renewed Loop Screen 61284 Dark Brown	8
12.Art. Renewed Loop/ Renewed Loop Screen 61285 Dark Brown	8
13.Art. Renewed Loop/ Renewed Loop Screen 63131 Orange	8
14.Art. Renewed Loop/ Renewed Loop Screen 63132 Dark Orange	8
15.Art. Renewed Loop/ Renewed Loop Screen 68283 Yellow Green	8
16.Art. Renewed Loop/ Renewed Loop Screen 68284 Yellow Green	8
17.Art. Renewed Loop/ Renewed Loop Screen 68285 Yellow Green	8
18.Art. Renewed Loop/ Renewed Loop Screen 68286 Dark Green	8
19.Art. Renewed Loop/ Renewed Loop Screen 68287 Green	8
20.Art. Renewed Loop/ Renewed Loop Screen 68288 Yellow Green	8

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RESULTADOS / RESULTS

Referencia <i>Reference</i>	Índice de solidez <i>Light fastness</i>
21.Art. Renewed Loop/ Renewed Loop Screen 68289 Dark Yellow Green	8
22.Art. Renewed Loop/ Renewed Loop Screen 62140 Green Yellow	8
23.Art. Renewed Loop/ Renewed Loop Screen 62141 Dark Green Yellow	8
24.Art. Renewed Loop/ Renewed Loop Screen 63133 Light Orange	8
25.Art. Renewed Loop/ Renewed Loop Screen 63134 Orange	8
26.Art. Renewed Loop/ Renewed Loop Screen 63135 Dark Orange	8
27.Art. Renewed Loop/ Renewed Loop Screen 64262 Red	8
28.Art. Renewed Loop/ Renewed Loop Screen 64263 Red	8
29.Art. Renewed Loop/ Renewed Loop Screen 64264 Dark Red	8
30.Art. Renewed Loop/ Renewed Loop Screen 66254 Blue	8
31.Art. Renewed Loop/ Renewed Loop Screen 66255 Blue	8
32.Art. Renewed Loop/ Renewed Loop Screen 66256 Dark Blue	8
33.Art. Renewed Loop/ Renewed Loop Screen 66257 Dark Blue	8
34.Art. Renewed Loop/ Renewed Loop Screen 66258 Green Blue	8
35.Art. Renewed Loop/ Renewed Loop Screen 66259 Green Blue	8
36.Art. Renewed Loop/ Renewed Loop Screen 66260 Dark Green Blue	8
37.Art. Renewed Loop/ Renewed Loop Screen 66261 Dark Green Blue	8
38.Art. Renewed Loop/ Renewed Loop Screen 67131 Turquoise	8
39.Art. Renewed Loop/ Renewed Loop Screen 67132 Turquoise	8
40.Art. Renewed Loop/ Renewed Loop Screen 67133 Dark Turquoise	8
41.Art. Renewed Loop/ Renewed Loop Screen 68290 Blue Green	8
42.Art. Renewed Loop/ Renewed Loop Screen 68291 Blue Green	8
43.Art. Renewed Loop/ Renewed Loop Screen 68292 Blue Green	8
44.Art. Renewed Loop/ Renewed Loop Screen 68293 Dark Blue Green	8
45.Art. Renewed Loop/ Renewed Loop Screen 68294 Green	8
46.Art. Renewed Loop/ Renewed Loop Screen 68295 Dark Green	8
47.Art. Renewed Loop/ Renewed Loop Screen 68296 Dark Green	8

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RESULTADOS / RESULTS

NOTA

REMARK

El índice de solidez a la luz indicado corresponde a:

- Variación de intensidad: No se observa
- Variación de tonalidad: No se observa
- Variación de brillo: No se observa

The fastness grade indicated comes up to:

- *Depth change: No notes*
- *Hue change: No notes*
- *Brightness change: No notes*

SIGNIFICADO DE LOS VALORES DE SOLIDEZ A LA LUZ

MEANING OF COLOUR VALUES FASTNESS TO ARTIFICIAL LIGHT

VALOR VALUE	SIGNIFICADO MEANING
8	EXCELENTE EXCELLENT
7	MUY BUENA VERY GOOD
6	BUENA GOOD
5	REGULAR MODERATE
4	MEDIANA FAIR
3	BAJA POOR BEHAVIOUR
2	DEFICIENTE - MALA POOR BEHAVIOUR
1	MUY DEFICIENTE VERY POOR

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RESULTADOS / RESULTS

SOLIDEZ DE LAS TINTURAS A LA LUZ COLOUR FASTNESS TO ARTIFICIAL LIGHT

Norma

Standard

AATCC TM 16:2004. Opción 3
AATCC TM 16:2004. Option 3

Aparato

Apparatus

Xenotest ALPHA LM HIGH ENERGY (02364E06)

Fecha de ensayo

Test date

10/03/2023

Condiciones de exposición

Exposure conditions

Black Panel 63°C, Humedad relativa 30%, 300-400 nm², 48 W/m²
Black Panel 63°C, Relative humidity 30%, 300-400 nm², 48 W/m²

Energía de radiación total

Total radiant energy

6912 KJ/m²

Condiciones de ensayo

Test conditions

Muestras sin rotación, Muestras montadas sobre soporte.
Without simple rotation, Mounting Procedure Backed.

Condiciones de evaluación

Evaluation conditions

Cámara de luces Gretagmacbeth (02021N06)
Light camera Gretagmacbeth (02021N06)
Escala de grises (02278N12)
Grey Scale (0278N12)

Referencia Reference	Índice de solidez Light fastness
01.Art. Renewed Loop/ Renewed Loop Screen 60338 Grey	5
02.Art. Renewed Loop/ Renewed Loop Screen 60339 Grey	5
03.Art. Renewed Loop/ Renewed Loop Screen 60340 Dark Grey	5
04.Art. Renewed Loop/ Renewed Loop Screen 60341 Dark Grey	5
05.Art. Renewed Loop/ Renewed Loop Screen 60999 Black	5
06.Art. Renewed Loop/ Renewed Loop Screen 61280 Beige	5
07.Art. Renewed Loop/ Renewed Loop Screen 61281 Dark Beige	5
08.Art. Renewed Loop/ Renewed Loop Screen 61282 Dark Beige	5
09.Art. Renewed Loop/ Renewed Loop Screen 60342 Dark Grey	5
10.Art. Renewed Loop/ Renewed Loop Screen 61283 Brown	5

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RESULTADOS / RESULTS

Referencia <i>Reference</i>	Índice de solidez <i>Light fastness</i>
11.Art. Renewed Loop/ Renewed Loop Screen 61284 Dark Brown	5
12.Art. Renewed Loop/ Renewed Loop Screen 61285 Dark Brown	5
13.Art. Renewed Loop/ Renewed Loop Screen 63131 Orange	5
14.Art. Renewed Loop/ Renewed Loop Screen 63132 Dark Orange	5
15.Art. Renewed Loop/ Renewed Loop Screen 68283 Yellow Green	5
16.Art. Renewed Loop/ Renewed Loop Screen 68284 Yellow Green	5
17.Art. Renewed Loop/ Renewed Loop Screen 68285 Yellow Green	5
18.Art. Renewed Loop/ Renewed Loop Screen 68286 Dark Green	5
19.Art. Renewed Loop/ Renewed Loop Screen 68287 Green	5
20.Art. Renewed Loop/ Renewed Loop Screen 68288 Yellow Green	5
21.Art. Renewed Loop/ Renewed Loop Screen 68289 Dark Yellow Green	5
22.Art. Renewed Loop/ Renewed Loop Screen 62140 Green Yellow	5
23.Art. Renewed Loop/ Renewed Loop Screen 62141 Dark Green Yellow	5
24.Art. Renewed Loop/ Renewed Loop Screen 63133 Light Orange	5
25.Art. Renewed Loop/ Renewed Loop Screen 63134 Orange	5
26.Art. Renewed Loop/ Renewed Loop Screen 63135 Dark Orange	5
27.Art. Renewed Loop/ Renewed Loop Screen 64262 Red	5
28.Art. Renewed Loop/ Renewed Loop Screen 64263 Red	5
29.Art. Renewed Loop/ Renewed Loop Screen 64264 Dark Red	5
30.Art. Renewed Loop/ Renewed Loop Screen 66254 Blue	5
31.Art. Renewed Loop/ Renewed Loop Screen 66255 Blue	5
32.Art. Renewed Loop/ Renewed Loop Screen 66256 Dark Blue	5
33.Art. Renewed Loop/ Renewed Loop Screen 66257 Dark Blue	5
34.Art. Renewed Loop/ Renewed Loop Screen 66258 Green Blue	5
35.Art. Renewed Loop/ Renewed Loop Screen 66259 Green Blue	5
36.Art. Renewed Loop/ Renewed Loop Screen 66260 Dark Green Blue	5
37.Art. Renewed Loop/ Renewed Loop Screen 66261 Dark Green Blue	5
38.Art. Renewed Loop/ Renewed Loop Screen 67131 Turquoise	5
39.Art. Renewed Loop/ Renewed Loop Screen 67132 Turquoise	5
40.Art. Renewed Loop/ Renewed Loop Screen 67133 Dark Turquoise	5
41.Art. Renewed Loop/ Renewed Loop Screen 68290 Blue Green	5

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RESULTADOS / RESULTS

Referencia <i>Reference</i>	Índice de solidez <i>Light fastness</i>
42.Art. Renewed Loop/ Renewed Loop Screen 68291 Blue Green	5
43.Art. Renewed Loop/ Renewed Loop Screen 68292 Blue Green	5
44.Art. Renewed Loop/ Renewed Loop Screen 68293 Dark Blue Green	5
45.Art. Renewed Loop/ Renewed Loop Screen 68294 Green	5
46.Art. Renewed Loop/ Renewed Loop Screen 68295 Dark Green	5
47.Art. Renewed Loop/ Renewed Loop Screen 68296 Dark Green	5

NOTA

REMARK

El índice de solidez a la luz indicado corresponde a:

- Variación de intensidad: No se observa
- Variación de tonalidad: No se observa
- Variación de brillo: No se observa

The fastness grade indicated comes up to:

- *Depth change: No notes*
- *Hue change: No notes*
- *Brightness change: No notes*

SIGNIFICADO DE LOS ÍNDICES DE SOLIDEZ VALORADOS CON ESCALA DE GRISES

MEANING OF COLOUR FASTNESS APPRAISAL EVALUATED WITH GREY SCALE

VALOR <i>VALUE</i>	SIGNIFICADO <i>MEANING</i>
5	MUY BUENA-EXCELENTE <i>VERY GOOD-EXCELLENT</i>
4	BUENA <i>GOOD</i>
3	MEDIANA-REGULAR <i>FAIR-MODERATE</i>
2	DEFICIENTE - MALA <i>POOR BEHAVIOUR</i>
1	MUY DEFICIENTE <i>VERY POOR</i>

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Isabel Soriano
Jefa Área Innovación
Chief of Innovation Area

CLAUSULAS DE RESPONSABILIDAD

- 1.- AITEX responde únicamente de los resultados sobre los métodos de análisis empleados, consignados en el informe y referidos exclusivamente a los materiales o muestras que se indican en el mismo y que queden en su poder, limitando a éstos la responsabilidad profesional y jurídica del Centro. Salvo mención expresa, las muestras han sido libremente elegidas y enviadas por el solicitante.
- 2.- AITEX no se hace responsable en ningún caso del mal uso de los materiales ensayados ni de la interpretación o uso indebido que pueda hacerse de este documento.
- 3.- La Oferta o Pedido a la que da conformidad el solicitante a través de firma y sello, constituye el Acuerdo Legalmente ejecutable en el que AITEX es responsable de salvaguardar y garantizar, la confidencialidad absoluta, de la gestión de toda la información obtenida o creada durante el desempeño de las actividades contratadas.
- 4.- Ante posibles discrepancias entre informes, se procederá a una comprobación dirimente en la sede central de AITEX. Asimismo, el solicitante se obliga a notificar a AITEX cualquier reclamación que reciba con causa en el informe, eximiendo a este Centro de toda responsabilidad en caso de no hacerlo así, y considerando los plazos de conservación de las muestras.
- 5.- AITEX proporcionará a solicitud del interesado, el procedimiento de tratamiento de quejas. En el caso de que se desee poner una, diríjanla a: calidad@aitex.es.
- 6.- AITEX no se hace responsable de la información proporcionada por los clientes, que se refleja en el Informe, y pueda afectar a la validez de los resultados.
- 7.- AITEX no se hace responsable de un estado inadecuado de la muestra recibida que pudiera comprometer la validez de los resultados, expresando tal circunstancia, en los informes de ensayo.
- 8.- AITEX podrá incluir en sus informes, análisis, resultados, etc., cualquier otra valoración que juzgue necesaria, aún cuando ésta no hubiere sido expresamente solicitada.
- 9.- Cuando se solicite Declaración de Conformidad, de no indicarse lo contrario, se aplicará la regla de decisión según ILAC-G8: 2009 con una zona de seguridad de 1U y una Probabilidad de Aceptación Falsa <2,5%.
- 10.- Las incertidumbres de ensayos, que se explicitan en el Informe de resultados, se han estimado para una $k=2$ (95% de probabilidad de cobertura). En caso de no informarse, éstas se encuentran a disposición del cliente en AITEX.
- 11.- Los materiales originales, o muestras sobrantes no sometidas a ensayo, se conservarán en AITEX durante los DOCE MESES posteriores a la emisión del informe, por lo que toda comprobación o reclamación que, en su caso, deseará efectuar el solicitante, se deberá ejercer en el plazo indicado.
- 12.- Este informe sólo puede enviarse o entregarse en mano al solicitante o a la persona debidamente autorizada por él.
- 13.- Los resultados de los ensayos y la declaración de cumplimiento con la especificación en este informe se refieren solamente a la muestra de ensayo tal como ha sido analizada/ensayada y no a la muestra/item del cual se ha sacado la muestra de ensayo.
- 14.- El cliente debe prestar atención, en todo momento, las fechas de la realización de los ensayos.
- 15.- De acuerdo a la Resolución EA (33) 31, los informes de ensayo deben incluir la identificación única de la muestra pudiendo añadirse además cualquier marca o etiquetado del fabricante. No está permitido reemitir informes de ensayo de denominaciones de muestras (referencias) no ensayadas, sólo se pueden volver a reemitir para la corrección de errores o la inclusión de datos omitidos que ya estaban disponibles en el momento del ensayo. El laboratorio no puede asumir la responsabilidad por la que se declara que el producto con el nuevo nombre comercial / marca comercial es estrictamente idéntico al ensayado originalmente; esta responsabilidad es del cliente.
- 16.- Este informe no podrá ser reproducido parcialmente sin la aprobación por escrito del laboratorio que lo emite.
- 17.- Los laboratorios de AITEX no realizan muestreos, de forma que los resultados de los informes de ensayo, son aplicables a la muestra tal como se recibió.

LIABILITY CLAUSES

- 1.- AITEX is liable only for the results of the methods of analysis used, as expressed in the report and referring exclusively to the materials or samples indicated in the same which are in its possession, the professional and legal liability of the Centre being limited to these. Unless otherwise stated, the samples were freely chosen and sent by the applicant.
- 2.- AITEX shall not be liable in any case of misuse of the test materials nor for undue interpretation or use of this document
- 3.- The Offer and / or Order to which the applicant gives approval through signature and seal, constitutes the Legally Executable Agreement in which AITEX is responsible for safeguarding and guaranteeing the absolute confidentiality of the management of all the information obtained or created during the performance of the contracted activities.
- 4.- In the eventuality of discrepancies between reports, a check to settle the same will be carried out in the head offices of AITEX. Also, the applicants undertake to notify AITEX of any complaint received by them as a result of the report, exempting this Centre from all liability if such is not done, the periods of conservation of the samples being taken into account.
- 5.- AITEX will provide at the request of the person concerned, the treatment of complaints procedure. In the event that you want to make it, direct it to: calidad@aitex.es.
- 6.- AITEX is not responsible for the information provided by customers, which is reflected in the Report, and may affect the validity of the results.
- 7.- AITEX is not responsible for an inadequate state of the sample received that could compromise the validity of the results, expressing such circumstance, in the test reports.
- 8.- AITEX may include in its reports, analyses, results, etc., any other evaluation which it considers necessary, even when it has not been specifically requested.
- 9.- When a Declaration of Conformity is requested, if not indicated otherwise, the decision rule according to ILAC-G8: 2009 will be applied with a security zone of 1U and a Probability of False Acceptance <2.5%.
- 10.- The uncertainties of tests, which are made explicit in the Results Report, have been estimated for a $k = 2$ (95% probability of coverage). If not informed, they are available to the client in AITEX.
- 11.- The original materials and rests of samples, not subject to test, will be retained in AITEX during the twelve months following the issuance of the report, so that any check or claim which, in his case, wanted to make the applicant, should be exercised within the period indicated.
- 12.- This report may only be sent or delivered by hand to the applicant or to a person duly authorised by the same.
- 13.- The results of the tests and the statement of compliance with the specification in this report refer only to the test sample as it has been analyzed / tested and not the sample / item which has taken the test sample.
- 14.- The client must attend at all times, to the dates of the realization of the tests.
- 15.- According to Resolution EA (33) 31, the test reports must include the unique identification of the sample, and any brand or label of the manufacturer may be added. It is not allowed to re-issue test reports of untested sample names (references), they can only be re-issued for error correction or inclusion of omitted data that were already available at the time of the test. The laboratory can not assume responsibility for declaring that the product with the new trade name / trademark is strictly identical to the one originally tested; This responsibility belongs to the client.
- 16.- This report may not be partially reproduced without the written approval of the issuing laboratory.
- 17.- AITEX laboratories do not carry out sampling, so that the results of the test reports are applicable to the sample as it was received.