



INFORME DE ENSAYO Nº:

122256-3

CLIENTE:	AKZO NOBEL COATINGS, S.L.U.
PERSONA DE CONTACTO:	Joan Garduño
DIRECCIÓN:	Feixa Llarga, 14-20, Pol. Ind. Zona Franca 08040 BARCELONA
OBJETO:	Ensayos para conformidad de esquema AgBB y LEEDv4.1
MUESTRA ENSAYADA:	Muestra Ref. «TITANPRO P-40 SATINADO»
FECHA DE RECEPCION:	09.12.2025
FECHAS DE ENSAYO:	16.12.2025 a 09.03.2026
FECHA DE EMISIÓN:	13.03.2026



Arantxa Pérez
Resp. Técnico Laboratorio Materiales
Construcción
Unidad Lab Services

* Los resultados del presente informe conciernen, única y exclusivamente al material ensayado.

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⁽¹⁾ Información aportada por el cliente. Tecnalia no se hace responsable de la información aportada por el cliente y esta información no está cubierta por la acreditación.





CARACTERISTICAS DE LAS MUESTRAS

Con fecha 09.12.2025 se recibió en Fundación Tecnalia R&I por parte de la empresa “**AKZO NOBEL COATINGS, S.L.U.**” una muestra referenciada como:

- ⁽¹⁾« TITANPRO P-40 SATINADO »

ENSAYO SOLICITADO

El ensayo solicitado es el siguiente:

- ◆ Ensayo de emisión de VOC's (Compuestos orgánicos volátiles) según la norma EN 16516 para establecer una clasificación según los criterios establecidos en el esquema “Health-related Evaluation of Emissions of Volatile Organic Compounds (VVOC, VOC and SVOC) from Building Products” del comité para la evaluación de aspectos de salud de los productos de la construcción (AgBB 2024).
- ◆ Standard Test Method for Volatile Content of Coatings, según la norma ASTM D2369-24

Los ensayos se han realizado en el laboratorio acreditado “eco-INSTITUT” con acreditación DAkkS cuyo informe original se adjunta como Anexo I.





ENSAYO REALIZADO

Ver informes en Anexo I.

RESULTADOS

Ver informes en Anexo I.



ANEXO I

**Informes laboratorio colaborador con
Tecnalia**

AKZO NOBEL COATINGS, S.L.U
C/Feixa Llarga, 14-20Pol. Ind. Zona
Franca 08040
Spain

Test Report No. 60711-A001-AgBB-L II

Test objective:	Proof of conformity with the AgBB scheme 2024
Article designation according to order:	Titanpro P-40 Satinado
Date of report:	04/03/2026
Number of pages of report:	20
Testing / responsible laboratory:	eco- INSTITUT Germany GmbH, Köln
Test objective fulfilled:	✓
Note:	The test results in the report refer exclusively to the test sample submitted by the manufacturer. The report is not permitted to be used in product and company advertising. The report may be published in full as technical documentation on the Internet with the written consent of eco- INSTITUT Germany GmbH. eco- INSTITUT Germany GmbH has recommended that the manufacturer repeats the test after 3 years at the latest. More information at www.eco-institut.de/en/advertising



Content

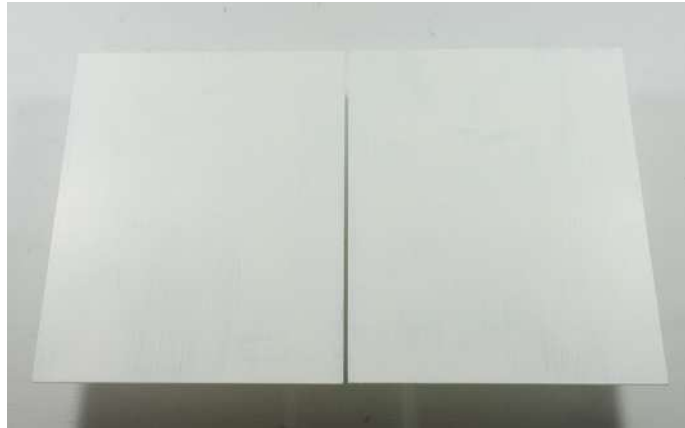
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Sample View

Internal sample number (filled in by laboratory)

60711-A001

Photo of the test specimen: A001



Article designation according to order:

Titanpro P-40 Satinado

Sample/batch number according to order:

no information

Type of sample:

Interior/exterior. For all types of wall surfaces.

Date of production:

no information

Sampling by:

AKZO NOBEL COATINGS, S.L.U; C/Feixa Llarga, 14-20Pol. Ind. Zona Franca
08040 Barcelona, España

Date of sampling:

09/12/2025

Location of sampling:

AKZO NOBEL COATINGS, S.L.U; C/Feixa Llarga, 14-20Pol. Ind. Zona Franca
08040 Barcelona, España

Receipt of sample / Condition upon delivery:

21/01/2026 / without objection



Statement of conformity with AgBB 2024

The sample with the internal sample number 60711-A001 has been tested on behalf of **AKZO NOBEL COATINGS, S.L.U.** The article description according to the order is **Titanpro P-40 Satinado**.

This evaluation is based on the test criteria of the scheme "Requirements for the Indoor Air Quality in Buildings: Health-related Evaluation Procedure for Emissions of Volatile Organic Compounds (VOC, VOC and SVOC) from Building Products " of the german Committee for Health-Related Evaluation of Building Products (AgBB 2024).

The results documented in the test report were evaluated as follows.¹

Test parameter	Result	Requirement	Requirement hold [yes/no]
Emission analysis			
Measurement time: 3 days after test chamber loading			
Sum VOC (C6-C16) ^{a)}	0.78 mg/m ³	≤ 10 mg/m ³	yes
Carcinogenic substances, cat. 1A and 1B acc. to Regulation (EC) No. 1272/2008 (and TRGS 905) (per substance) ^{b)}	≤ 0.01 mg/m ³	≤ 0.01 mg/m ³	yes
Measurement time: 28 days after test chamber loading			
Sum VOC (C6-C16) including SVOC with LCI ^{a)}	0.054 mg/m ³	≤ 1.0 mg/m ³	yes
Sum SVOC without LCI (C16-C22) ^{a)}	< 0.005 mg/m ³	≤ 0.1 mg/m ³	yes
R-value (dimensionless)	0.06	≤ 1	yes
Sum VOC without LCI	< 0.005 mg/m ³	≤ 0.1 mg/m ³	yes
Carcinogenic substances, cat. 1A and 1B acc. to Regulation (EC) No. 1272/2008 (and TRGS 905) (per substance) ^{b)}	≤ 0.001 mg/m ³	≤ 0.001 mg/m ³	yes

a) For sum VOC (C6-C16) and sum SVOC (C16-C22) only substances ≥ 5 µg/m³ are considered.

b) Excluded are defined substances classified as carcinogen 1A or 1B for which a limit value can be derived for the most sensitive endpoint at which a carcinogenic potential can no longer be assumed and for which a LCI value is derived on this basis.

¹ If a measurement result that slightly exceeds the specification is assessed as "not fulfilled", this is based on the agreement of the "shared risk of measurement uncertainty (shared risk approach)". According to this, the probability that the statement is correct is ≥ 50 %. Similarly, a result slightly below the specification value also only has a probability of ≥ 50 % of being compliant. I.e., the risk of making a false negative statement regarding the fulfilment of the specification is just as high as the risk of making a false positive statement (more information at https://www.eco-institut.de/en/2019/07/measurement_uncertainty/).



Summary statement of conformity with AgBB 2024

The sample with the internal sample number 60711-A001, article description according to order: **Titanpro P-40 Satinado**, meets the emission requirements of the AgBB scheme.

Cologne, 04/03/2026

A handwritten signature in black ink, appearing to read 'M. A. Dobaj'.

Marc-Anton Dobaj, M.Sc. Crystalline Materials
(Project management)

Laboratory report

1 Emission analysis

Test method

DIN EN 16516:2020-10

Testing and evaluation of the release of dangerous substances;
determination of emissions into indoor air

A001, Preparation of test specimen

Date:

27/01/2026

Test specimen preparation:

Application on glass; with a brush; application quantity 150 g/m²;
drying / pre-conditioning outside of the test chamber for 72 hours

Masking of backside:

not applicable

Masking of edges:

not applicable

Relationship of unmasked
edges to surface:

not applicable

Arrangement in test chamber:

on tripod

Loading reference unit:

area-specific [m²]

Dimensions:

2 x 25.0 cm x 20.0 each with 7.5 g application quantity

A001, Test chamber conditions according to DIN EN ISO 16000-9:2024-08

Chamber volume:

0.100 m³

Temperature:

23 °C ± 1 °C

Relative humidity:

50 % ± 5 %

Air pressure:

normal

Air:

cleaned

Air change rate:

0.5 h⁻¹

Air velocity:

0.3 m/s

Loading:

1.0 m²/m³

Specific air flow rate:

0.5 m³/(m²·h)

Starting time of the test (t₀):

30/01/2026

Air sampling:

02/02/2026 (3 days after test chamber loading)
27/02/2026 (28 days after test chamber loading)

1.1 Sample A001, Volatile organic compounds after 3 days

Test objective:

Volatile organic compounds (VOC), test chamber, air sampling 3 days after test chamber loading

Method description / Analytics:

Formaldehyde and other carbonyl compounds:	DIN ISO 16000-3:2023-12 (DNPH method, HPLC-DAD)
Limit of quantification:	2 µg/m ³
Volatile organic compounds:	DIN ISO 16000-6:2022-03 (Tenax TA®, TD-GC-MS)
Limit of quantification calibrated substances:	1 µg/m ³ (1,4-Cyclohexanedimethanol, Diethylene glycol, 1,4-Butanediol: 5 µg/m ³ ; Neodecanoic acid: 10 µg/m ³)
Reporting limit non-calibrated substances:	1 µg/m ³

Test result:

Internal sample number: 60711-A001

	Substance	CAS No.	RT [min]	Concentration+ calib. substances ≥ 1 µg/m ³ uncalib. substances ≥ 1 µg/m ³ DNPH ≥ 2 µg/m ³ [µg/m ³]	Toluene- equivalent substances ≥ 5 µg/m ³ [µg/m ³]	SER+ [µg/(m ² ·h)]	CMR Classifi- cation++	LCI AgBB 2024 [µg/m ³]	R-value
	Aliphatic hydrocarbons (n-, iso- and cyclo-)								
VOC	1-Dodecene	112-41-4	17.35	2	< 5	1		750	0.00
	Aliphatic mono alcohols (n-, iso-, cyclo-) and dialcohols								
VOC	1-Nonanol	143-08-8	17.35	2	< 5	1		1700	0.00
	Glycols, Glycol ethers, Glycol esters								
VOC	Propylene glycol (Propane-1,2- diol)	57-55-6	7.18	140	58	70		2100	0.07
VOC	Ethylene glycol (Ethane-1,2- diol)	107-21-1	6.23	2	< 5	1		3400	0.00
VOC	Diethylene glycol	111-46-6	12.27	1	< 5	0.5		5700	0.00
VOC	2,2,4-Trimethyl-1,3- pentanediol monoisobutyrate (Texanol®)	25265-77-4	21.9	43	32	22		850	0.05
VOC	2,2,4-Trimethyl-1,3- pentanediol diisobutyrate (TXIB)	6846-50-0	25.21	1	< 5	0.5		1300	0.00
VOC	Ethylidiglycol, (Diethylene glycol monoethyl ether, 2-(2- Ethoxyethoxy)ethanol)	111-90-0	13.25	300	240	150		350	0.86
	Acids								
VOC	Acetic acid	64-19-7	4.43	260	32	130		1200	0.22

	Substance	CAS No.	RT [min]	Concentration+ calib. substances ≥ 1 µg/m ³ uncalib. substances ≥ 1 µg/m ³ DNPH ≥ 2 µg/m ³ [µg/m ³]	Toluene- equivalent substances ≥ 5 µg/m ³ [µg/m ³]	SER+ [µg/(m ² ·h)]	CMR Classifi- cation++	LCI AgBB 2024 [µg/m ³]	R-value
VOC	Propionic acid	79-09-4	5.86	2	< 5	1		1500	0.00
	Esters								
VVOC	Vinyl acetate	108-05-4	4.68	1	< 5	0.5	Carc. 2		
	Other identified substances in addition to LCI list								
VOC	Acetamide	60-35-5	7.49	6	< 5	3	Carc. 2		
VOC	Surfyrnol	126-86-3	22.22	1	< 5	0.5			
VOC	1-Dodecanol	112-53-8	23.43	1	< 5	0.5		1700	0.00
VOC	not ident. VOC, m/z 91 61*		5.78	1	< 5	0.5			
VOC	Butyl ether*		10.55	11	11	5.5			
VOC	aromatic compound, m/z 43 121*		15.42	1	< 5	0.5			
VOC	Cluster alkenes and/or other alcohols*	--	16.5 - 18.5	22	22	11		6000	0.00

+ identified and calibrated substances, substance specific calculated

++ classification according to Regulation (EG) N° 1272/2008: Categories Carc. 1A, 1B and 2, Muta. 1A, 1B and 2, Repr. 1A, 1B and 2, TRGS 905: K1A, K1B, K2, M1A, M1B, M2, R1A, R1B, R2; IARC: Group 1, 2A, 2B and 3, DFG MAK-list: Kategorie III1 to III5

* unidentified substances, calculated as toluene equivalent reported with significant mass fragments as mass-to-charge ratio (m/z)

n. d.: not determined

Carcinogenic, mutagenic, and reproductive toxic compounds*	Concentration after 3 days [µg/m³]	SERa [µg/(m² · h)]
CMR 1: VOC (incl. VVOC and SVOC) with the following categorisations: Regulation (EC) No. 1272/2008: Category Carc. 1A and 1B, Muta. 1A and 1B, Repr. 1A and 1B; TRGS 905: K1A, K1B, M1A, M1B, R1A, R1B; IARC: Group 1 and 2A; DFG (MAK list): Categories III1, III2 (sum)	< 1	< 0.5
C 1: VOC (incl. VVOC and SVOC) with the following categorisations: Regulation (EG) Nr. 1272/2008: Category Carc. 1A u. 1B; TRGS 905: K1A, K1B (sum)	< 1	< 0.5

TVOC, Total volatile organic compounds	Concentration after 3 days [µg/m³]	SERa [µg/(m² · h)]
Sum of VOC according to DIN EN 16516	400	200
Sum of VOC according to AgBB 2024	780	390
Sum of VOC according to eco-INSTITUT-Label	800	400
Sum of VOC according to DIN ISO 16000-6	300	150

TSVOC, Total semi volatile organic compounds	Concentration after 3 days [µg/m³]	SERa [µg/(m² · h)]
Sum of SVOC according to DIN EN 16516	< 5	< 2.5
Sum of SVOC without LCI according to AgBB 2024	< 5	< 2.5
Sum of SVOC without LCI according to eco-INSTITUT-Label	< 1	< 0.5
Sum of SVOC with LCI according to AgBB 2024	< 5	< 2.5

TVVOC, Total very volatile organic compounds	Concentration after 3 days [µg/m³]	SERa [µg/(m² · h)]
Sum of VVOC according to AgBB 2024	< 5	< 2.5
Sum of VVOC according to eco-INSTITUT-Label	1	0.5

*Excluding formaldehyde and acetaldehyde (Carc. 1B) due to an assumed "practical threshold" under which a significant carcinogenic risk is no longer to be expected (see Federal Institute for Risk Assessment (2006): Toxicological evaluation of formaldehyde and Federal Environment Agency (2016): Reference value for formaldehyde in indoor air and protocol of the 11th meeting of 'Ausschusses für Innenraumrichtwerte' (AIR), 11/2020). In the case of a toxicological emission assessment, a single-substance analysis of the concentrations is necessary.

In the opinion of the committee for Indoor Air Guide Values (Ausschuss für Innenraumrichtwerte) of the Federal Environment Agency, the concentration of 0.1 mg formaldehyde/m³ indoor air, based on a measurement period of half an hour, should not be exceeded, also for a short time (Bundesgesundheitsblatt 2016 · 59: 1040-1044 DOI 10.1007 / s00103 -016-2389-5 © Springer-Verlag Berlin Heidelberg 2016).

Other sums of VOC	Concentration after 3 days [µg/m³]	SERa [µg/(m² · h)]
VOC without LCI according to AgBB 2024 (sum)	11	5.5
VOC without LCI according to eco-INSTITUT-Label (sum)	20	10
CMR 2: VOC (incl. VVOC and SVOC) with the following categorisations: Regulation (EC) No. 1272/2008: Category Carc. 2, Muta. 2, Repr. 2; TRGS 905: K2, M2, R2; IARC: Group 2B; DFG (MAK list): Category III3 (sum)	7	3.5
Sensitising compounds with the following categorisations: DFG (MAK list): Category IV; Regulation (EC) No. 1272/2008: skin sensitising, respiratory sensitising; TRGS 907 (sum)	< 1	< 0.5
Bicyclic Terpenes (sum)	< 1	< 0.5
C9 - C14 Alkanes / Isoalkanes as dekane-equivalent (sum)	< 1	< 0.5
C4 - C11 Aldehydes, acyclic, aliphatic (sum)	< 2	< 1
C9 - C15 Alkylated benzenes (sum)	< 1	< 0.5
Cresols (sum)	< 1	< 0.5

Risk value for assessment of LCI	R-value
R-value according to eco-INSTITUT-Label	1.20
R-value according to AgBB 2024	1.19
R-value according to Belgian regulation	1.19
R-value according to EU-LCI	1.20

Note:

Due to different requirements in the respective guidelines, the calculation of TVOC, TVVOC, TSVOC and R-value may result in different values. Short-chain carbonyl compounds (C1-C5) are quantified via HPLC acc. to DIN ISO 16000-3:2013-01. Therefore, no toluene equivalents are given for VVOC. These substances are taken into concern by means of their substance specific calibration via the sum of VVOC acc. to DIN EN 16516:2020-10. For VOC however, the substance specific calibration takes place via HPLC whereas the TVOC is calculated using the toluene equivalent determined via Tenax acc. to DIN EN 16516:2020-10.

1.2 Sample A001, Volatile organic compounds after 28 days

Test objective:

Volatile organic compounds (VOC), test chamber, air sampling 28 days after test chamber loading

Method description / Analytics:

Formaldehyde and other carbonyl compounds:	DIN ISO 16000-3:2023-12 (DNPH method, HPLC-DAD)
Limit of quantification:	2 µg/m ³
Volatile organic compounds:	DIN ISO 16000-6:2022-03 (Tenax TA®, TD-GC-MS)
Limit of quantification calibrated substances:	1 µg/m ³ (1,4-Cyclohexanedimethanol, Diethylene glycol, 1,4-Butanediol: 5 µg/m ³ ; Neodecanoic acid: 10 µg/m ³)
Reporting limit non-calibrated substances:	1 µg/m ³

Test result:

Internal sample number: | 60711-A001

	Substance	CAS No.	RT [min]	Concentration+ calib. substances ≥ 1 µg/m ³ uncalib. substances ≥ 1 µg/m ³ DNPH ≥ 2 µg/m ³ [µg/m ³]	Toluene- equivalent substances ≥ 5 µg/m ³ [µg/m ³]	SER+ [µg/(m ² ·h)]	CMR Classifi- cation++	LCI AgBB 2024 [µg/m ³]	R-value
	Glycols, Glycol ethers, Glycol esters								
VOC	Propylene glycol (Propane-1,2-diol)	57-55-6	7.15	1	< 5	0.5		2100	0.00
VOC	2,2,4-Trimethyl-1,3-pentanediol monoisobutyrate (Texanol®)	25265-77-4	21.87	10	7	5		850	0.01
VOC	Ethyl diglycol, (Diethylene glycol monoethyl ether, 2-(2-Ethoxyethoxy)ethanol)	111-90-0	13.2	6	5	3		350	0.02
	Acids								
VOC	Acetic acid	64-19-7	4.34	38	5	19		1200	0.03
	Other identified substances in addition to LCI list								
VOC	Cluster alkenes and/or other alcohols*	--	16.5-18.5	2	< 5	1		6000	0.00

+ identified and calibrated substances, substance specific calculated

++ classification according to Regulation (EG) N° 1272/2008: Categories Carc. 1A, 1B and 2, Muta. 1A, 1B and 2, Repr. 1A, 1B and 2, TRGS 905: K1A, K1B, K2, M1A, M1B, M2, R1A, R1B, R2; IARC: Group 1, 2A, 2B and 3, DFG MAK-list: Kategorie III1 to III5

* unidentified substances, calculated as toluene equivalent reported with significant mass fragments as mass-to-charge ratio (m/z)

n. d.: not determined

Carcinogenic, mutagenic, and reproductive toxic compounds*	Concentration after 28 days [µg/m³]	SERa [µg/(m² · h)]
CMR 1: VOC (incl. VVOC and SVOC) with the following categorisations: Regulation (EC) No. 1272/2008: Category Carc. 1A and 1B, Muta. 1A and 1B, Repr. 1A and 1B; TRGS 905: K1A, K1B, M1A, M1B, R1A, R1B; IARC: Group 1 and 2A; DFG (MAK list): Categories III1, III2 (sum)	< 1	< 0.5
C 1: VOC (incl. VVOC and SVOC) with the following categorisations: Regulation (EG) Nr. 1272/2008: Category Carc. 1A u. 1B; TRGS 905: K1A, K1B (sum)	< 1	< 0.5

TVOC, Total volatile organic compounds	Concentration after 28 days [µg/m³]	SERa [µg/(m² · h)]
Sum of VOC according to DIN EN 16516	17	8.5
Sum of VOC according to AgBB 2024	54	27
Sum of VOC according to eco-INSTITUT-Label	57	29
Sum of VOC according to DIN ISO 16000-6	22	11

TSVOC, Total semi volatile organic compounds	Concentration after 28 days [µg/m³]	SERa [µg/(m² · h)]
Sum of SVOC according to DIN EN 16516	< 5	< 2.5
Sum of SVOC without LCI according to AgBB 2024	< 5	< 2.5
Sum of SVOC without LCI according to eco-INSTITUT-Label	< 1	< 0.5
Sum of SVOC with LCI according to AgBB 2024	< 5	< 2.5

TVVOC, Total very volatile organic compounds	Concentration after 28 days [µg/m³]	SERa [µg/(m² · h)]
Sum of VVOC according to AgBB 2024	< 5	< 2.5
Sum of VVOC according to eco-INSTITUT-Label	< 1	< 0.5

*Excluding formaldehyde and acetaldehyde (Carc. 1B) due to an assumed "practical threshold" under which a significant carcinogenic risk is no longer to be expected (see Federal Institute for Risk Assessment (2006): Toxicological evaluation of formaldehyde and Federal Environment Agency (2016): Reference value for formaldehyde in indoor air and protocol of the 11th meeting of 'Ausschusses für Innenraumrichtwerte' (AIR), 11/2020). In the case of a toxicological emission assessment, a single-substance analysis of the concentrations is necessary.

In the opinion of the committee for Indoor Air Guide Values (Ausschuss für Innenraumrichtwerte) of the Federal Environment Agency, the concentration of 0.1 mg formaldehyde/m³ indoor air, based on a measurement period of half an hour, should not be exceeded, also for a short time (Bundesgesundheitsblatt 2016 · 59: 1040-1044 DOI 10.1007 / s00103 -016-2389-5 © Springer-Verlag Berlin Heidelberg 2016).

Other sums of VOC	Concentration after 28 days [µg/m³]	SERa [µg/(m² · h)]
VOC without LCI according to AgBB 2024 (sum)	< 5	< 2.5
VOC without LCI according to eco-INSTITUT-Label (sum)	< 1	< 0.5
CMR 2: VOC (incl. VVOC and SVOC) with the following categorisations: Regulation (EC) No. 1272/2008: Category Carc. 2, Muta. 2, Repr. 2; TRGS 905: K2, M2, R2; IARC: Group 2B; DFG (MAK list): Category III3 (sum)	< 1	< 0.5
Sensitising compounds with the following categorisations: DFG (MAK list): Category IV; Regulation (EC) No. 1272/2008: skin sensitising, respiratory sensitising; TRGS 907 (sum)	< 1	< 0.5
Bicyclic Terpenes (sum)	< 1	< 0.5
C9 - C14 Alkanes / Isoalkanes as dekane-equivalent (sum)	< 1	< 0.5
C4 - C11 Aldehydes, acyclic, aliphatic (sum)	< 2	< 1
C9 - C15 Alkylated benzenes (sum)	< 1	< 0.5
Cresols (sum)	< 1	< 0.5

Risk value for assessment of LCI	R-value
R-value according to eco-INSTITUT-Label	0.06
R-value according to AgBB 2024	0.06
R-value according to Belgian regulation	0.06
R-value according to EU-LCI	0.06

Note:

Due to different requirements in the respective guidelines, the calculation of TVOC, TVVOC, TSVOC and R-value may result in different values. Short-chain carbonyl compounds (C1-C5) are quantified via HPLC acc. to DIN ISO 16000-3:2013-01. Therefore, no toluene equivalents are given for VVOC. These substances are taken into concern by means of their substance specific calibration via the sum of VVOC acc. to DIN EN 16516:2020-10. For VOC however, the substance specific calibration takes place via HPLC whereas the TVOC is calculated using the toluene equivalent determined via Tenax acc. to DIN EN 16516:2020-10.

Cologne, 04/03/2026



Michael Stein, Dipl.-Chem.
 (Laboratory Management)

Appendix


Sampling sheet

Produktprüfung Product testing
 Zertifizierung Certification
 Beratung Consulting

60711-A001

eco
 INSTITUT

Sampling Sheet*

Testing laboratory	eco-INSTITUT Germany GmbH Schanzenstr. 6-20, D-51063 Cologne Germany Tel. +49 (0)221 - 931245-0 Fax +49 (0)221 - 931245-33	Sampler (Name, Company, Phone number)	Same as manufacturer.
Name of manufacturer / distributor at place of sampling (Address / Stamp)	AKZO NOBEL COATINGS, S.L.U C/Feixa Llarga, 14-20Pol. Ind. Zona Franca 08040 BARCELONA, ESPAÑA	Customer/ Invoice recipient (if different from manufacturer)	TECNALIA CIF: G48975767 Parque Científico y Tecnológico de Bizkaia C/Geldo, Edificio 700 E-48160 Derio (Bizkaia) Spain
Product name	Titanpro P-40 Satinado	Product type (e.g. parquet, floor covering)	Interior/exterior. For all types of wall surfaces.
Model / programme / series	--	Batch	--
Article number	--	Production date of batch	--
Samples are taken from	<input type="checkbox"/> current production <input checked="" type="checkbox"/> storage	Sampling date	09.12.25
Storage location before sampling	<input type="checkbox"/> in production <input checked="" type="checkbox"/> storage <input type="checkbox"/> other	Storage conditions before sampling	<input type="checkbox"/> open <input checked="" type="checkbox"/> packaged
Storage location: Manufacturer location		Packaging material:	Plastic
Special features (possible negative effects through emissions at place of sampling (e.g. benzine, exhaust fumes), unclanties, questions etc.)		Application rate:	
Validation			
Hereby the signer affirms the accuracy of the above-mentioned statements. The sample was chosen, sampled and packaged according to the sampling guidelines.			
Date: 16.01.26	Signature:  (Company stamp)		
MEMBER OF BASQUE RESEARCH & TECHNOLOGY ALLIANCE			
* Please take one sampling sheet for each sample! The sampling instruction must be strictly maintained.			
(Please insert quote number, or - if not available, please enter the desired analysis)	Order	Reference from Tecnalia: 122256 Test required: 02193+06698+02181 Letter to conformity to Leed certification official order: PC26-00314-141	

eco-INSTITUT Germany GmbH / Schanzenstrasse 6-20 / Carlswerk Kupferzug 5.2 / D-51063 Köln / Germany
 Tel. +49 221.931245-0 / Fax +49 221.931245-33 / eco-institut.de / Geschäftsführer: Dr. Frank Kuebart
 HRB 17917 / USt-ID: DE 122653308 / Raiffeisenbank Frechen-Hürth, IBAN: DE60370623651701900010, BIC: GENODE33HAN



List of calibrated Volatile Organic Compounds (VOC)

Aromatic hydrocarbons (30)

1,2,3-Trimethylbenzene
1,2,4-Trimethylbenzene
1,3,5-Trimethylbenzene
1-Isopropyl-2-methylbenzene
1-Isopropyl-4-methylbenzene
1,2,4,5-Tetramethylbenzene
Ethylbenzene
n-Propylbenzene
Isopropylbenzene (Cumene)⁴
1,3-Diisopropylbenzene
1,4-Diisopropylbenzene
n-Butylbenzene
1-Propenylbenzene (beta-Methylstyrene)
Toluene
2-Ethyltoluene
Vinyltoluene
o-Xylene
m-/p-Xylene
Styrene
Phenylacetylene
2-Phenylpropene (alpha-Methylstyrene)
4-Phenylcyclohexene
1-Phenyloctane
1-Phenyldecane²
1-Phenylundecane²
Indene
Naphthalene
1-Methylnaphthalene
2-Methylnaphthalene
1,4-Dimethylnaphthalene

Aliphatic hydrocarbons (24)

2-Methylpentane¹
3-Methylpentane¹
Methylcyclopentane
n-Pentane¹
n-Hexane
Cyclohexane
Methylcyclohexane
1,4-Dimethylcyclohexane
n-Heptane
2,2,4,6,6-Pentamethylheptane
n-Octane
n-Nonane
n-Decane
n-Undecane
n-Dodecane
n-Tridecane
n-Tetradecane
n-Pentadecane
n-Hexadecane
Decahydronaphthalene
1-Octene
1-Decene
1-Dodecene
4-Vinylcyclohexene

Terpenes (12)

delta-3-Carene
alpha-Pinene
beta-Pinene
alpha-Terpinene
Longipinene
Limonene
Longifolene
Isolongifolene
beta-Caryophyllene
alpha-Phellandrene
Myrcene
Camphene

Aliphatic alcohols and ether (18)

Ethanol¹
1-Propanol¹
2-Propanol¹
2-Methyl-1-propanol
1-Butanol
tert-Butanol
1-Pentanol
1-Hexanol
Cyclohexanol
2-Ethyl-1-hexanol
1-Heptanol
1-Octanol
1-Nonanol
1-Decanol
1,4-Cyclohexandimethanol
4-Hydroxy-4-methyl-pentan-2-one
(Diacetone alcohol)
Methyl-tert-butyl ether (MTBE)¹
Tetrahydrofuran (THF)

Aromatic alcohols (phenols) (8)

Furfuryl alcohol
Benzyl alcohol
Phenol
2-Phenylphenol (oPP)
BHT (2,6-Di-tert-butyl-4-methylphenol)
o-Cresol
m-/p-Cresol
4-Chloro-3-methylphenol (Chlorocresol)

Glycols, Glycol ether, Glycol ester (49)

Ethyleneglycol (Ethan-1,2-diol)
Propylenglycol (Propane-1,2-diol)
Diethylene glycol
Dipropylene glycol
Neopentyl glycol
Hexyleneglycol
Ethylidiglycol
Ethylene glycol monobutyl ether
Diethylene glycol methyl ether
Diethylene glycol monobutyl ether
Diethylene glycol phenyl ether
Dipropylene glycol-dimethyl ether

Dipropylene glycol mono-n-butyl ether
Dipropylene glycol mono-tert-butyl ether
Dipropylene glycol monomethyl ether
Dipropylene glycol mono-n-propyl ether
Tripropylene glycol monomethyl ether
Triethylene glycol dimethyl ether
1,2-Propylene glycol dimethyl ether
1,2-Propylene glycol-n-propyl ether
1,2-Propylene glycol-n-butyl ether
Butyl glycolate
2-Methoxyethanol
2-Ethoxyethanol
2-Methylethoxyethanol
2-Propoxyethanol
2-Hexoxyethanol
2-(2-Hexoxyethoxy)ethanol
2-Phenoxyethanol
1-Methoxy-2-propanol
2-Methoxy-1-propanol
1-Ethoxy-2-propanol
1-tert-Butoxy-2-propanol
3-Methoxy-1-butanol
1,4-Butanediol
1,2-Dimethoxyethane
1,2-Diethoxyethane
1-Methoxy-2-(2-methoxy-ethoxy)ethane
Ethylene carbonate
Propylene carbonate
2-Methoxy-1-propyl acetate
Diethylene glycol monomethyl ether acetate
2-Methoxyethyl acetate
2-Ethoxyethyl acetate
2-Butoxy ethyl acetate
Dipropylene glycol monomethyl ether acetate
Propylene glycol diacetate
Texanol
TXIB (Texanol isobutyrate)

Aldehydes (26)

Formaldehyde^{1,3,4}
Acetaldehyde^{1,3,4}
Propanal^{1,3}
Butanal^{1,3}
3-Methyl-1-butanal
Pentanal
Hexanal
2-Ethylhexanal
Heptanal
Octanal
Nonanal
Decanal
Propenal (Acrolein)¹
Isobutanal (Methacrolein)³
2-Butenal
2-Pentenal³
2-Hexenal
2-Heptenal
2-Octenal

2-Nonenal
2-Decenal
2-Undecenal
Ethanediol (Glyoxal)^{1,3}
Glutaraldehyde
Furfural
Benzaldehyde

Ketones (14)

Acetone^{1,3}
1-Hydroxyacetone
Ethylmethylketone³
Methylisobutylketone
3-Methyl-2-butanone
Cyclopentanone
2-Methylcyclopentanone
Cyclohexanone
2-Methylcyclohexanone
2-Hexanone
2-Heptanone
Acetophenone
Isophorone
4-Methylbenzophenone²

Acids (11)

Acetic acid
Propionic acid
Pivalic acid
Butyric acid
Isobutyric acid
n-Valeric acid
n-Caproic acid
2-Ethylhexanoic acid
n-Heptanoic acid
n-Octanoic acid
Neodecanoic acid

Esters and Lactones (33)

Methyl acetate¹
Ethyl acetate¹
Vinyl acetate¹
Propyl acetate
Isopropyl acetate
2-Methoxy-1-methylethyl acetate
n-Butyl acetate
Isobutylacetate
2-Ethylhexyl acetate
n-Butyl formate
Methyl acrylate
Methyl methacrylate
Butyl methacrylate
Ethyl acrylate
n-Butyl acrylate
2-Ethylhexyl acrylate
2-Ethylhexyl methacrylate

Hexanediol diacrylate
Dipropylene glycol diacrylate
Dimethyl succinate
Dimethyl glutarate
Dimethyl adipate
Dibutyl fumarate
Dibutyl maleate
Diisobutyl succinate
Diisobutyl glutarate
Butyrolactone
Dimethyl phthalate
Diethyl phthalate²
Dipropyl phthalate²
Dibutyl phthalate²
Diisobutyl phthalate²
(5-Ethyl-1,3-dioxan-5-yl)methyl acrylate

Cyclic siloxanes (5)

Hexamethylcyclotrisiloxane (D3)
Octamethylcyclotetrasiloxane (D4)
Decamethylcyclopentasiloxane (D5)
Dodecamethylcyclohexasiloxane (D6)
Tetradecamethylcycloheptasiloxane (D7)

Carcinogens (44)

Isopropylbenzene (Cumene)⁴
Benzene⁴
Benzophenone⁴
Trichloromethane (Chloroform)⁴
1,2-Dichloroethane⁴
1,2,3-Trichloropropane⁴
Trichloroethene⁴
trans-1,3-Dichloropropene⁴
cis-1,3-Dichloropropene⁴
Chloroprene⁴
1,3-Dichloro-2-propanol⁴
alpha-Chlorotoluene⁴
alpha,alpha,alpha-Trichlorotoluene⁴
1,4-Dioxane⁴
1,2-Dibromoethane⁴
2-Nitropropane⁴
2,3-Dinitrotoluene⁴
2,4-Dinitrotoluene⁴
2,6-Dinitrotoluene⁴
3,4-Dinitrotoluene^{2,4}
o-Anisidine⁴
o-Toluidine⁴
4-Chloro-o-toluidine⁴
Acrylonitrile^{1,4}
Azobenzene^{2,4}
Furan^{1,4}
2-Butanonoxime⁴
N-Nitrosopyrrolidine⁴
4-Chloroaniline⁴

2-Nitroanisole⁴
p-Cresidine⁴
Diethyl sulfate⁴
Epichlorohydrin⁴
1,2-Dichloropropane⁴
Urethane⁴
Acrylamide⁴
trans-1,4-Dichlorobut-2-ene⁴
1,2-Dibromo-3-chloropropane⁴
2-Nitrotoluene⁴
Quinoline⁴
Phenylglycidyl ether⁴
2,4,5-Trimethylaniline⁴
4-Chlorobenzotrithionide⁴
Nitrosodipropylamine⁴

Others (35)

5-Nitro-o-toluidine²
2,2'-Azobisisobutyronitrile
Tetramethylsuccinonitrile
Caprolactam
2-Methylfuran
2-Pentylfuran
Methanamine
Diethylamine¹
Triethylamine
Triethylene diamine (DABCO®)
Triethyl phosphate
Tributyl phosphate²
5-Chloro-2-methyl-4-isothiazolin-3-one (CIT)
2-Methyl-4-isothiazolin-3-one (MIT)
2-n-Octyl-4-isothiazolin-3-one (OIT)
Formamide
N-Methylformamide
Dimethylformamide (DMF)
Acetamide
N-Methyl-2-pyrrolidone
N-Ethyl-2-pyrrolidone
N-Butyl-2-pyrrolidone
Aniline⁵
Cyclohexyl isocyanate
5-Ethyl-1,3-dioxan-5-methanol
Dichloromethane¹
Tetrachloromethane
1,1,1-Trichloroethane
2-Chloropropane
Tetrachloroethene
Chlorobenzene
1,4-Dichlorobenzene
1,1-Dichloroethene¹
2-Pentanone oxime
Tribromomethane (Bromoform)

1 VVOC

2 SVOC

3 Analysis acc. to DIN ISO 16000-3:2023-12 (DNPH)

4 Carcinogens, category 1A and 1B according to Regulation (EC) No 1272/2008 and TRGS 905

5 When analysing with TD-GC-MS, aniline can occur as a thermal decomposition product of other substances (e.g. 1,3-Diphenylguanidine).
A cold analytical method is recommended to confirm the result.

(Status: June 2025)

Definition of terms

CAS No. (Chemical Abstracts Service)	International designation standard for chemical substances
CMR	VOCs, VVOCs and SVOCs classified as carcinogenic, mutagenic or toxic for reproduction according to Regulation (EC) No. 1272/2008, TRGS 905, IARC list and DFG (MAK list)
Limit of quantification (LOQ)	Lower limit of quantification in the analytical method within the defined measurement uncertainty
NIK / LCI	Lowest concentration of interest; substance-specific value for health assessment of emissions from products, indicated in $\mu\text{g}/\text{m}^3$
RT (retention time)	Total time required for an analyte to pass the column (time between injection and detection of the analyte)
R value	Sum of quotients of concentration and LCI value for all substances for which a LCI value is derived
R value according to AgBB	R-value for all substances $\geq 5 \mu\text{g}/\text{m}^3$ with LCI value, calculated according to the LCI list of the AgBB scheme
R-value according to Belgian regulation	R-value for all substances $\geq 5 \mu\text{g}/\text{m}^3$ with LCI-value, calculated according to the LCI-list of the Belgian regulation
R value according to eco-INSTITUT-Label	R-value for all substances $\geq 1 \mu\text{g}/\text{m}^3$ with LCI value, calculated according to the LCI list of the AgBB scheme
R value according to EU-LCI	R-value for all substances $\geq 5 \mu\text{g}/\text{m}^3$ with EU-LCI value, calculated according to the EU-LCI list of the European Commission
SER	Specific emission rate (see "Explanation of Specific Emission Rate SER")
SVOC (semi volatile organic compound)	Organic compound eluting in the retention range > C16 (n-hexadecane) to C22 (docosane)
Toluene equivalent	Concentration of a substance quantified by the TIC response factor of toluene (calculation of the concentration by comparing the integral of the substance with the integral of toluene)
TSVOC	Sum of the concentrations of all identified and unidentified semi volatile organic compounds eluting in the retention range > C16 (n-hexadecane) to C22 (docosane)
TSVOC according to DIN EN 16516	Sum of all SVOC $\geq 5 \mu\text{g}/\text{m}^3$ (as toluene equivalent)
TSVOC with LCI according to AgBB	Sum of all SVOC with LCI $\geq 5 \mu\text{g}/\text{m}^3$ (quantified substance-specific)
TSVOC with LCI according to eco-INSTITUT-Label	Sum of all SVOC with LCI $\geq 1 \mu\text{g}/\text{m}^3$ (quantified substance-specific)
TSVOC without LCI according to AgBB	Sum of all SVOC without LCI $\geq 5 \mu\text{g}/\text{m}^3$ (as toluene equivalent)
TSVOC without LCI according to eco-INSTITUT label	Sum of all calibrated SVOC without LCI $\geq 1 \mu\text{g}/\text{m}^3$ (quantified substance-specific) and all non-calibrated SVOC without LCI $\geq 1 \mu\text{g}/\text{m}^3$ (as toluene equivalent)
TVOC	Sum of the concentrations of all identified and unidentified volatile organic compounds eluting in the retention range from C6 (n-hexane) to C16 (n-hexadecane)



TVOC according to DIN EN 16516	Sum of all VOC $\geq 5 \mu\text{g}/\text{m}^3$ in the retention range C6 to C16, calculated as toluene equivalent (used i.a. for M1)
TVOC according to AgBB	Sum of all VOCs with LCI $\geq 5 \mu\text{g}/\text{m}^3$ (quantified substance-specific) and all VOCs without LCI $\geq 5 \mu\text{g}/\text{m}^3$ (as toluene equivalent) (used i.a. for the Blue Angel)
TVOC according to eco-INSTITUT-Label	Sum of all calibrated VOC $\geq 1 \mu\text{g}/\text{m}^3$ (quantified substance-specific) and all non-calibrated VOC $\geq 1 \mu\text{g}/\text{m}^3$ (as toluene equivalent) (used i.a. for natureplus)
TVOC according to ISO 16000-6	Total area of the chromatogram in the retention range C6 - C16 as toluene equivalent according to DIN ISO 16000-6, Annex A.1 item 3 (used i.a. for CDPH, BIFMA and the French VOC regulation)
TVOC without LCI according to AgBB	Sum of all VOCs without LCI $\geq 5 \mu\text{g}/\text{m}^3$ as toluene equivalent
TVOC without LCI according to eco-INSTITUT-Label	Sum of all calibrated VOCs without LCI $\geq 1 \mu\text{g}/\text{m}^3$ (quantified substance-specific) and all non-calibrated VOCs without LCI $\geq 1 \mu\text{g}/\text{m}^3$ (as toluene equivalent)
TVVOC	Sum of the concentrations of all identified and unidentified very volatile organic compounds eluting in the retention range $< \text{C6}$ (n-hexane)
TVVOC according to AgBB	Sum of all VVOC with LCI $\geq 5 \mu\text{g}/\text{m}^3$ (quantified substance-specific) and all VVOC without LCI $\geq 5 \mu\text{g}/\text{m}^3$ (as toluene equivalent)
TVVOC according to eco-INSTITUT-Label	Sum of all calibrated VVOC $\geq 1 \mu\text{g}/\text{m}^3$ (substance-specific quantified) and all non-calibrated VVOC $\geq 1 \mu\text{g}/\text{m}^3$ (as toluene equivalent)
VOC (volatile organic compound)	Organic compound eluting in the retention range from C6 (n-hexane) to C16 (n-hexadecane)
VVOC (very volatile organic compound)	Organic compound eluting in the retention range $< \text{C6}$ (n-hexane)

Commentary on emission analysis

Test method

Measurement of the volatile organic compounds takes place in the test chamber in conditions similar to those applying in practice. Standardised test conditions are defined for the test chamber regarding loading, air exchange, relative humidity, temperature, and incoming air, based on the type of test specimen and the required guideline. These conditions and the underlying standards are to be found in the section on test methods in the laboratory report.

Air samples are taken from the test chamber at defined points in time during the continuously running test. To this end, approximately 5 L of air are collected from the test chamber at an air flow rate of 100 mL/min on Tenax and approx. 100 L at an air flow rate of 0.8 L/min on silica gel coated with DNPH (2,4-dinitrophenylhydrazine).

After thermal desorption, the substances adsorbed on Tenax are analysed using gas chromatographic separation and mass spectrometric determination. The gas chromatographic separation is performed with a slightly polar capillary column of 60 m in length.

The substances derivatised with DNPH for the determination of formaldehyde and other short-chain carbonyl compounds (C1 - C6) are analysed using high-performance liquid chromatography (HPLC).

Over 200 compounds, including volatile organic compounds (C6 - C16), semi-volatile organic compounds (C16 - C22) and – insofar as possible with this method – also very volatile organic compounds (less than C6) are determined and quantified individually.

All other substances – insofar as possible – are identified through comparison with a library of spectra. The quantification of these substances and non-identified substances is performed through a comparison of their signal area with the signal of toluene.

The determined substance concentrations are corrected using the recovery rate of the internal standard (toluene-d8). Identification and quantification of substances is carried out from a concentration (limit of quantification) of 1 µg per m³ test chamber air or 2 µg/m³ for DNPH-derivatised substances. In the case of highly loaded samples, the evaluation limit of non-calibrated substances is raised in some cases, as it is no longer possible to assign individual, small signals due to the large number of signals.

Quality assurance

The eco-INSTITUT Germany GmbH is granted flexible scope of accreditation pursuant to DIN EN ISO/IEC 17025:2018-03. The accreditation covers the analytical determination of all volatile organic compounds, including the test chamber method.

In each analysis the analytical system is checked using an external standard based on the specifications in standard DIN EN 16516:2020-10. The stability of the analytical systems is documented based on the test standard using control charts.

Laboratory performance is assessed at least once a year in inter-laboratory comparisons by comparing the results with those obtained by other laboratories for identical samples.

A blank is run prior to introducing the test specimen into the test chamber to check for the possible presence of volatile organic compounds.

The expanded measurement uncertainty U for the analytical determination of all volatile organic compounds, including the test chamber method, is estimated to 29.3 % (k=2). The calculation is based on DIN ISO 11352:2013-03 (Nordtest).



Explanation of Specific Emission Rate SER

Emission measurements are accomplished in test chambers under defined physical conditions (temperature, relative humidity, room loading, air change rate etc.).

Test chamber measurement results are directly comparable only if the investigations were accomplished under the same basic conditions.

If the differences of the physical conditions refer only to the change of air rate and/or the loading, the "SER" or "specific emission rate" can be used for comparability of the measurement results. The SER indicates how many volatile organic compounds (VOC) are released by the sample for each material unit and hour (h).

The SER can be calculated using the formula below for each proven individual component of the VOC from the data in the test report.

As material units the following are applicable:

l = unit of length (m)	relation between emission and length
a = unit area (m ²)	relation between emission and surface
v = unit volume (m ³)	relation between emission and volume
u = piece unit (unit = piece)	relation between emission and complete unit

From this the different dimensions for SER result:

length-specific	SER _l	in µg/(m·h)
surface-specific	SER _a	in µg/(m ² ·h)
volume-specific	SER _v	in µg/(m ³ ·h)
unit-specific	SER _u	in µg/(u·h)

SER thus represents a product specific rate, which describes the mass of the volatile organic compound, which is emitted by the product per time unit at a certain time after beginning of the examination.

$$\text{SER} = q \cdot c$$

- q specific air flow rate (quotient from change of air rate and loading)
c concentration of the measured substance(s)

The result can be indicated in milligrams (mg) in place of micro grams (µg), whereby 1 mg = 1000 µg.



eco-INSTITUT Germany GmbH

Laborprüfung
Laboratory testing

AKZO NOBEL COATINGS, S.L.U
C/Feixa Llarga, 14-20Pol. Ind. Zona
Franca 08040
Spain

Test Report No. 60711-A001-L II

Test objective:	VOC Content analysis according to ASTM D2369-24
Article designation according to order:	Titanpro P-40 Satinado
Date of report:	04/03/2026
Number of pages of report:	5
Testing / responsible laboratory:	eco-INSTITUT Germany GmbH, Köln
Note:	The test results in the report refer exclusively to the test sample submitted by the manufacturer. The report is not permitted to be used in product and company advertising. Further information at www.eco-institut.de/en/advertising



eco-INSTITUT Germany GmbH / Schanzenstrasse 6-20 / Carlswerk 1.19 / 51063 Köln / Germany / Tel. +49 221.931245-0
eco-institut.de / eco-institut-label.de / Geschäftsführer: Dr. Frank Kuebart, Daniel Tigges / HRB 17917 / USt-ID: DE122653308





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Sample View

Internal sample number (filled in by laboratory)	60711-A001
Article designation according to order:	Titanpro P-40 Satinado
Sample/batch number according to order:	no information
Type of sample:	Interior/exterior. For all types of wall surfaces.
Date of production:	no information
Sampling by:	AKZO NOBEL COATINGS, S.L.U; C/Feixa Llarga, 14-20Pol. Ind. Zona Franca 08040 Barcelona, España
Date of sampling:	09/12/2025
Location of sampling:	AKZO NOBEL COATINGS, S.L.U; C/Feixa Llarga, 14-20Pol. Ind. Zona Franca 08040 Barcelona, España
Receipt of sample / Condition upon delivery:	21/01/2026 / without objection



Laboratory report

1 VOC Content according to ASTM D2369-24

Test parameter:

Total VOC content of the cured product

Test method:

Method description / Analytics:

Sample preparation:

Before the analysis the aluminum shells are heated at a temperature of 110±5 °C for one hour and weighed afterwards.

Analysis principle:

The sample is heated with a suitable solvent in an Aluminum shell for 60 minutes at a temperature of 110±5 °C in a drying oven, and the volatile content is determined by differential weighing.

For each sample a duplicate determination is performed.

Reproducibility of the analytical balance: 0.2 mg

Test result:

Internal sample number:

60711-A001

Method	Principle	Sample preparation**	Parameter	Detection limit
ASTM D2369-24	Gravimetric	Method A	Total Volatiles, SCAQMD rule 304	1 g/l

Duplicate determination	Applied sample amount	Mass of aluminium shell	mass of aluminium shell + mass of sample after heating	Weight difference
	[g]	[g]	[g]	[%]
Determination 1	0.3317	1.1003	1.2739	47.66
Determination 2	0.3055	1.0902	1.2501	47.66

Difference between the measured contents
[%]
0



Water content (acc. to producer's data)	Density	Volatile content according to ASTM D2369-24		Solids content	Volatile organic content (corrected for water content)		VOC Limit Value*
		[%]	g/l		[%]	g/l	
48.36	1240	47.66	591	52.34	< 0.1	< 1	50

* VOC Limit Value for "Default" (SCAQMD 1113, 02/2016)

**

	Method A	Method B	Method C	Method D	Method E
Coating Type	One Component Waterborne	One Component Solventborne	Multi-Component Waterborne	Multi-Component Solventborne	Multi-Component > 90% Solids
Solvent Type and Amount	3 ± 1 ml Water	3 ± 1 ml Toluene	3 ± 1 ml Water	3 ± 1 ml Toluene	-
Specimen Weight	0,3 ± 0,1 g if expected result is ≤ 40% 0,5 ± 0,1 g if expected result is > 40%				see ^A
Induction Time	-	-	1 h	1 h	24 h

^A Specimen Weight [g] = Thickness x 3,14 x (d_{dish}² / 4) x (Density/1000)

Cologne, 04/03/2026

Michael Stein, Dipl.-Chem.
 (Laboratory Management)



Appendix


Sampling sheet

Produktprüfung Product testing
 Zertifizierung Certification
 Beratung Consulting

60711-A001



Sampling Sheet*

Testing laboratory	eco-INSTITUT Germany GmbH Schanzenstr. 6-20, D-51063 Cologne Germany Tel. +49 (0)221 - 931245-0 Fax +49 (0)221 - 931245-33	Sampler (Name, Company, Phone number)	Same as manufacturer.
Name of manufacturer / distributor at place of sampling (Address / Stamp)	AKZO NOBEL COATINGS, S.L.U C/Feixa Llarga, 14-20Pol. Ind. Zona Franca 08040 BARCELONA, ESPAÑA	Customer/ Invoice recipient (if different from manufacturer)	TECNALIA CIF: G48975767 Parque Científico y Tecnológico de Bizkaia C/Geldo, Edificio 700 E-48160 Derio (Bizkaia) Spain
Product name	Titanpro P-40 Satinado	Product type (e.g. parquet, floor covering)	Interior/exterior. For all types of wall surfaces.
Model / programme / series	--	Batch	--
Article number	--	Production date of batch	--
Samples are taken from	<input type="checkbox"/> current production <input checked="" type="checkbox"/> storage	Sampling date	09.12.25
Storage location before sampling	<input type="checkbox"/> in production <input checked="" type="checkbox"/> storage <input type="checkbox"/> other	Storage conditions before sampling	<input type="checkbox"/> open <input checked="" type="checkbox"/> packaged
Storage location: Manufacturer location		Packaging material:	Plastic
Special features (possible negative effects through emissions at place of sampling (e.g. benzine, exhaust fumes), unclanties, questions etc.)		Application rate:	
Validation			
Hereby the signer affirms the accuracy of the above-mentioned statements. The sample was chosen, sampled and packaged according to the sampling guidelines.			
Date: 16.01.26	Signature:  (Company stamp)		
MEMBER OF BASQUE RESEARCH & TECHNOLOGY ALLIANCE			
* Please take one sampling sheet for each sample! The sampling instruction must be strictly maintained.			
(Please insert quote number, or - if not available, please enter the desired analysis)	Order	Reference from Tecnalia: 122256 Test required: 02193+06698+02181 Letter to conformity to Leed certification official order: PC26-00314-141	

eco-INSTITUT Germany GmbH / Schanzenstrasse 6-20 / Carlswerk Kupferzug 5.2 / D-51063 Köln / Germany
 Tel. +49 221.931245-0 / Fax +49 221.931245-33 / eco-institut.de / Geschäftsführer: Dr. Frank Kuebart
 HRB 17917 / USt-ID: DE 122653308 / Raiffeisenbank Frechen-Hürth, IBAN: DE60370623651701900010, BIC: GENODE33HAN



AKZO NOBEL COATINGS, S.L.U
C/Feixa Llarga, 14-20Pol. Ind. Zona
Franca 08040

Dear Sir or Madam,

based on the evaluation of the Test Reports no. **60711-A001-AgBB-L II** and **60711-A001-L II** dated **04/03/2026** the testing results of the product **Titanpro P-40 Satinado**, commissioned by **AKZO NOBEL COATINGS, S.L.U**, comply with the following requirements:

LEEDv4.1 Rating System for projects outside of the U.S.- EQ Credit: Low-Emitting Materials

LEEDv4 Rating System for projects outside of the U.S. - EQ Credit: Low-Emitting Materials

Testing standard: EN 16516:2017+A1:2020				
Compliance: AgBB Testing and Evaluation Scheme (2018-2024)				
Product category: Wall panels			Loading factor: 1.0 m ² /m ³ for wall products	
Application quantity: 150 g/m ²				
Requirements 28 days after test chamber loading:				
Formaldehyde	Sum of R ratios	Sum VOC w/o LCIs	TVOC	Requirements hold
≤ 10 µg/m ³	≤ 1	≤ 100 µg/m ³	≤ 1000 µg/m ³	Yes
Range of TVOC acc. to DIN ISO 16000-6: ≤ 0.5 mg/m ³				

VOC content acc. to South Coast Air Quality Management District (SCAQMD) Rule 1113		
Testing standard: ASTM D2369-24		
VOC content	Requirement*	* requirement for "Default" (SCAQMD 1113, 02/2016)
< 1 g/L	50 g/L	

Cologne, 04/03/2026



Marc-Anton Dobaj, M.Sc. Crystalline Materials
(Project management)