



THE ŁUKASIEWICZ RESEARCH NETWORK
INSTITUTE FOR ENGINEERING OF POLYMER
MATERIALS AND DYES
87-100 Toruń ul. M. Skłodowskiej-Curie 55



AB 163

Paint and Plastics Department
44 – 100 Gliwice
ul. Chorzowska 50 A

Analytical Research Laboratory
Laboratory for Testing of Coatings

Test Report No. GF/226/2020

Case No. GF.4130.198.2020

Type of test	Test subject	Name and address of the Client
Determination of the content of volatile organic compounds (VOC) acc. to PN-EN ISO 11890-2:2013-06	Koncentrat gruntujący	P.P.U.H. TUKAN 32-700 Bochnia ul. Łany 6

SAMPLE		TESTS	
No.	Acceptance	Beginning	End
226/2020	16.10.2020	09.11.2020	13.11.2020

Performer:

Sonia Sabas

/Full name/

.....
/Sign/

Report performed by:

Sonia Sabas

/Full name/

13.11.2020

.....
/Date, Sign/

Copies:

- Client
- GF

Authorized by:

Grażyna Kamińska-Bach

/Full name/

13.11.2020

.....
/Date, Sign/

Accepted by:

BIEROWNIA ZAKŁADU
Badawczo-Analitycznego
Laboratorium Badań Wyrobów Lakierowych

13.11.2020

.....
/Stamp, Date, Sign/

Test results apply only to tested sample. Test Report cannot be copied differently than in the whole form without written permission of Analytical Research Laboratory GF.

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of 13.11.2020

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1. Sample description:

Client has provided sample "Koncentrat gruntujący" in a plastic packet about volume of 1 l.

2. Test description:

Determination of the content of volatile organic compounds (VOC) in the product in the "ready-to-use" condition was carried out in accordance with PN-EN ISO 11890-2: 2013-06 *Paints and varnishes - Determination of volatile organic compounds (VOC) - Part 2: Gas-chromatographic method*. The analysis was performed using an ATI Unicam 610 Series gas chromatograph. The separation of components was carried out on an Rtx-5 capillary column.

The density of the product in the "ready to use" state was determined according to PN-EN ISO 2811-1:2016-04, $\rho_s = 1.32 \text{ g/cm}^3$ (sample temperature: 22.6 °C, 99.99 cm³ metal pycnometer).

The VOC content in the product "ready to use" was calculated according to PN-EN ISO 11890-2: 2013-06, p.10.3 (method 2):

- method 2 - VOC content, in g/l, in the product in „ready to use” condition acc. to the formula:

$$VOC = \sum_{i=1}^{i=n} m_i \cdot \rho_s \cdot 1000$$

where: m_i - weight, in g, substance i in 1 g the test sample ρ_s - density, in g/ml, of sample in temperature 23°C

3. Test results:

Status of method /*: A – the test performed by accredited methods

The VOC content of the product in "ready-to-use" condition is 1,8 g/l.

End of Report

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/Report performed by, Sign/