

Kiwa GmbH, Tannenweg 22m (Speicher I), 18059 Rostock

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Die Akkreditierung gilt für die in der Urkundenanlage  
D-PL-11217-03-00 aufgeführten Prüfverfahren.

**Test report** **122300802-0001**

Client: Mekanika Makina  
Istanbul, Turkey

Date: 03/18/2023

Purpose of test <sup>a)</sup>: examination of material according to KTW-BWGL (07 March 2022), point 5.6.3  
procedure 2; microbial growth DIN EN 16421:2015-05

Project number <sup>a)</sup>: PC000148991

Material <sup>a) k)</sup>: Granula Virgin PTFE

Sample was taken by <sup>a)</sup>: Sent by the client

Date of sample receipt: 09/15/2023

Date of analysis: 10/26/2023 to 01/18/2024

Place of testing: Kiwa GmbH  
Unit Analytik und Umwelt  
18059 Rostock, Tannenweg 22m (Speicher I)

This test report was created by: Rika Rüb



<sup>a)</sup> information of the client <sup>k)</sup> amendment

Geschäftsführer: Prof. Dr. Roland Hüttl, Wulf Jannsen, Dr. Gero Schönwaßer  
Amtsgericht Hamburg | HRB 130568 | St.Nr.: 46/736/03268

Client: Mekanika Makina  
Project no.: PC000148991  
Correction test report no.: 122300802-0001



## 1. Examined product:

|  |                                     |
|--|-------------------------------------|
| Sample description <sup>a)</sup> :       | PTFE Gaskets 15, P2 (Gasket/Washer) |
| Base material <sup>a) k)</sup> :         | Granula Virgin PTFE                 |
| Manufacturer of material <sup>a)</sup> : | Mekanika Makina                     |
| Production place <sup>a)</sup> :         | Istanbul, Turkey                    |
| Proposed use of the product:             | Drinking water distribution         |
| Sampling out of:                         | Information not provided            |
| Production date <sup>a)</sup> :          | Information not provided            |
| Lot / Batch number <sup>a)</sup> :       | Information not provided            |
| Sampling date <sup>a)</sup> :            | Information not provided            |
| Date of sample receipt:                  | 09/15/2023                          |
| Sampling <sup>a)</sup> :                 | Sent by the client                  |

## 2. Composition evaluation

The results of the composition evaluation are not the subject of this test report.

### 3. Results of the testing

Table 1: Test results

| Duration        | Start exposure<br>26-10-2023 | 1-Month value  | 2-Month value  | 3-Month value  |
|-----------------|------------------------------|--|--|--|
|                 |                              | date 23-11-2023  | date 21-12-2023  | date 18-01-2024  |
| 1-Month samples |                              | 0,02 ml (1 <sup>st</sup> preparation)<br>0,02 ml (2 <sup>nd</sup> preparation)<br>0,02 ml (average 1a) | <0,01 ml (1 <sup>st</sup> preparation)<br><0,01 ml (2 <sup>nd</sup> preparation)<br><0,01 ml (average 1b)  | 0,01 ml (1 <sup>st</sup> preparation)<br><0,01 ml (2 <sup>nd</sup> preparation)<br><0,01 ml (average 1c)   |
|                 |                              | >1,5 ml (positive control)<br><0,01 ml (negative control)  | >1,5 ml (positive control)<br><0,01 ml (negative control)  | >1,5 ml (positive control)<br><0,01 ml (negative control)  |
| 2-Month samples |                              |  | <0,01 ml (1 <sup>st</sup> preparation)<br><0,01 ml (2 <sup>nd</sup> preparation)<br><0,01 ml (average 2a)<br><br>>1,5 ml (positive control)<br><0,01 ml (negative control) |  |
| 3-Month samples |                              |  |  | 0,02 ml (1 <sup>st</sup> preparation)<br><0,01 ml (2 <sup>nd</sup> preparation)<br>0,01 ml (average 3a)<br><br>>1,5 ml (positive control)<br><0,01 ml (negative control) |

Surface swabs were taken from all samples with a result < 0.01 ml and surface colonization could be proven for all of them.

**The examined sample Mekanika Makina manufactured from Granula Virgin PTFE meets the requirements of KTW-BWGL (07 March 2022) – Method 2; 5.6.3 for M1 products.**

Yours sincerely

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 i.V. Astrid Schwaneberg  
 Dipl.-Chemist  
 Deputy Head of Laboratory

These test results are only valid with respect to the above stated materials investigated. Partial duplication of this test report is not allowed without a written permission of the test laboratory.

4. Threshold Values - DIN EN 16421:2015-05 and KTW-BWGL (March 7, 2022) / 5.6.3 table 3b

|  | 1-Month value  | 2-Month value   | 3-Month value   |
|--|--|---|---|
| M 1  | all results $\leq (0,05 + 0,02) \text{ ml} / 800\text{cm}^2$   |   |   |
| M 2  | $\leq (0,12 + 0,03) \text{ ml} / 800\text{cm}^2$<br>if $1a \geq 1b$ , 1a will not be subject to evaluation | $\leq (0,12 + 0,03) \text{ ml} / 800\text{cm}^2$<br>when $1c \leq 1b$ | $\leq (0,12 + 0,03) \text{ ml} / 800\text{cm}^2$<br>when $3a \leq 2a$ |
| M 3  | $\leq (0,20 + 0,03) \text{ ml} / 800\text{cm}^2$<br>if $1a \geq 1b$ , 1a will not be subject to evaluation | $\leq (0,20 + 0,03) \text{ ml} / 800\text{cm}^2$<br>when $1c \leq 1b$ | $\leq (0,20 + 0,03) \text{ ml} / 800\text{cm}^2$<br>when $3a \leq 2a$ |
| Positive control<br>(Paraffin on stainless steel plates) | $\geq 1,5 \text{ ml} / 800\text{cm}^2$   | $\geq 1,5 \text{ ml} / 800\text{cm}^2$                                | $\geq 1,5 \text{ ml} / 800\text{cm}^2$                                |
| Negative control<br>(stainless steel)                    | $\leq 0,01 \text{ ml} / 800\text{cm}^2$  | $\leq 0,01 \text{ ml} / 800\text{cm}^2$                               | $\leq 0,01 \text{ ml} / 800\text{cm}^2$                               |

Remark: all threshold values are arithmetic means.