KIAST 한국분석과학연구소
Korea Institute of Analytical Science and Technology

Test Report

- **KIAST No. :** 24KA0139
- **Issued No. :** 24KA0139-01
- **Receipt Date :** Sep. 13, 2024
- **Issued Date :** Oct. 02, 2024

Sample Description	KYK Alkaline Water Ionizer
Client	KYK R&D
Address	555, Duncheon-daero, Joongwon-gu, Seoungnam-si. Gyeonggi-do, 13215 South Korea

TEST ITEMS & RESULTS

Test Items	Test Standards	Results	Note
Microplastic removal rate	Greater than 20 μm	99.9 % removed	

* Attachment : Sample photo
* Test method : This test method applies an In-house method developed by KIAST
  - It is a test of the microplastic removal rate of the customer-provided sample (water purifier), and it is the result of testing the purified water that has passed through the sample.
  - Purified sample volume: 1 L of purified water (alkaline water stage 4)
  - Plastic Reference Material : Polyethylene (27 μm ~ 32 μm, 2504 ea)
* Analytical equipments :
  μ-Raman (XploRA Plus, Horiba, France), (Particle Finder)
  μ-FTIR (LUMOS II, Bruker Optics, USA) (Transmittance, Focal Plane Array(FPA) mapping)

Tested by Dowoon Kim

Technical Manager
Ph.D.

Jaehak Jung J. H. Jung

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1. THE TEST RESULTS CONTAINED IN THIS REPORT ARE LIMITED TO RESULTS ON THE SAMPLE(S) THAT IS PROVIDED BY CLIENT AND ARE NOT NECESSARILY INDICATIVE OR REPRESENTATIVE OF THE QUALITIES OF THE LOT FROM WHICH THE SAMPLE(S) WAS TAKEN OR OF ALL PRODUCTS.
2. FURTHER USE OF THE RESULTS OF THIS REPORT IS PROHIBITED UNLESS ALLOWED UNDER A SEPARATE AGREEMENT SET FORTH IN AN OFFICIAL DOCUMENT THAT IS ESTABLISHED BETWEEN THE CLIENT IDENTIFIED ON THIS LETTER AND THE KOREA INSTITUTE OF ANALYTICAL SCIENCE AND TECHNOLOGY (KIAST).
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