

## TEST REPORT

**CLIENT NAME** : BEIJING ORIENTAL YUHONG WATERPROOF TECHNOLOGY CO. LTD

**ADDRESS** : BUILDING A, COURTYARD NO. 19, KECHUANG 9TH STREET  
BEIJING ECONOMIC AND TECHNOLOGICAL DEVELOPMENT AREA  
BEIJING, CHINA

**ATTENTION TO** : MS. SUSAN YI

**ACCOUNT CHARGEABLE TO** : BEIJING ORIENTAL YUHONG WATERPROOF TECHNOLOGY CO. LTD

**PROJECT CODE** : PT07774

**PROJECT TITLE** : GENERAL TESTING

**SUBJECT** : WATER TOXICITY TEST

**TEST METHODS** : BS 6920: 2014 - SUITABILITY OF NON-METALLIC PRODUCTS FOR USE IN CONTACT WITH WATER INTENDED FOR HUMAN CONSUMPTION WITH REGARD TO THEIR EFFECT ON THE QUALITY OF THE WATER.

|   |   |            |
|---|---|------------|
| 1) SPECIFICATION  | : | PART 1     |
| 2) SAMPLES FOR TESTING  | : | PART 2:1   |
| 3) ODOUR AND FLAVOUR OF WATER   | : | PART 2:2:1 |
| 4) APPEARANCE OF WATER  | : | PART 2:3   |
| 5) GROWTH OF AQUATIC MICRO-ORGANISMS                                    | : | PART 2:4   |
| 6) THE EXTRACTION OF SUBSTANCES THAT MAY BE OF CONCERN TO PUBLIC HEALTH | : | PART 2:5   |
| 7) THE EXTRACTION OF METALS   | : | PART 2:6   |

**JOB REF.** : T24-24174

**SAMPLE REFERENCE** : YHCoat-931 Flex

**DATE RECEIVED** : 11-Mar-2024

**DATE TESTED** : 20-May-2024 To 24-Jul-2024

**DATE OF REPORT** : 25-Jul-2024

**TOTAL PAGES** : 5 (including cover page)

### REMARKS:

TEST WAS PERFORMED BY SETSCO SERVICES PTE LTD (REF.: FB8500314526).



# TEST REPORT

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**SetSCO Services Pte Ltd**  
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Business Reg No. 196900269D

**Date: 24/07/2024**

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**Your Ref: -**

**Our Ref: FB8500314526**

**Subject** : Testing of "T24-24174" for use in contact with water intended for human consumption. The sample was submitted on 17/05/2024 and testing commenced on 20/05/2024.

**Tested For** : **Element Construction Testing (S) Pte Ltd**  
58 Sungei Kadut Loop  
Singapore 729501  
**Attention: Yong Song**

**Test Method** : **BS 6920 : 2014 - Suitability of non-metallic products for use in contact with water intended for human consumption with regard to their effect on the quality of the water.**

Part 1 : Specification  
Part 2:1 : Samples for testing  
Part 2:2:1 : Odour and flavour of water  
Part 2:3 : Appearance of water  
Part 2:4 : Growth of aquatic micro-organisms  
Part 2:5 : The extraction of substances that may be of concern to public health  
Part 2:6 : The extraction of metals

## Sample Description :-

Sample name : T24-24174  
Lot/Batch : YHCoat-931 Flex

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LA-1993-0051-C LA-1998-0144-D  
LA-1993-0067-G LA-2000-0181-F  
LA-1994-0068-A LA-2012-0519-E  
LA-1987-0001-B LA-1987-0001-B-1

**Results**

**Odour and Flavour of Water**

Temperature of Extraction: 23°C

No discernible odour was detected in the chlorine-free and chlorinated extracts.  
 No flavour was detected in the first and second dilutions of both chlorine-free and chlorinated extracts.

*The results obtained show that the sample **complies** with the requirements of BS6920:2014 Part 2:2:1, for the odour and flavour of water test.*

**Appearance of Water**

Temperature of Extraction: 23°C

| Test                 | Sample | Maximum Admissible Level |
|----------------------|--------|--------------------------|
| Colour (Hazen Units) | <2.5   | 5                        |
| Turbidity (FNU)      | <0.05  | 0.5                      |

*The results obtained show that the sample **complies** with the requirements of BS6920:2014 Part 2:3, for the appearance of water test.*

**Growth of Aquatic Microorganisms**

Test Temperature: 30°C

**MDOD (Mean Dissolved Oxygen Difference)**

| Determination      | MDOD (mg/L) | Requirements (MDOD, mg/L) |
|--------------------|-------------|---------------------------|
| Positive Reference | 5.37        | 7.5 ± 2.5                 |
| Negative Reference | 0.06        | 0.0 ± 0.6                 |
| Test Sample        | 1.44        | ≤1.69                     |

**MDOC (Mean Dissolved Oxygen Concentration)**

| Determination | MDOC (mg/L) | Requirements (MDOC, mg/L) |
|---------------|-------------|---------------------------|
| Control       | 7.51        | 8.5 ± 2.5                 |

*The results obtained show that the sample **complies** with the requirements of BS6920:2014 Part 2:4, for the growth of aquatic micro-organisms test.*



**The extraction of substances that may be of concern to public health**

Temperature of Extraction: 23°C

Presence of confluent cell layer was observed in the test extract in contact with Vero cells. This observation indicates a non-cytotoxic response of the test extract to the cells.

*The results obtained show that the sample **complies** with the requirements of BS6920:2014 Part 2.5, for the cytotoxicity test.*

**The extraction of metals**

Temperature of Extraction: 23°C

Analysis was performed using ICP/AAS and ICPMS.

| Determination   | Results of Metal Content in Final Extract (µg/L) |          | Max Allowable Concentration (µ g/L) |
|-----------------|--|----------|-------------------------------------|
|                 | Sample 1   | Sample 2 |                                     |
| Aluminium as Al | 59.8680  | 70.243   | 200                                 |
| Antimony as Sb  | <0.5   | <0.5     | 5                                   |
| Arsenic as As   | <1   | 1.387    | 10                                  |
| Boron as B      | <100   | <100     | 1000                                |
| Cadmium as Cd   | <0.5   | <0.5     | 5                                   |
| Chromium as Cr  | <5   | <5       | 50                                  |
| Iron as Fe      | <20  | <20      | 200                                 |
| Lead as Pb      | <1   | <1       | 10                                  |
| Manganese as Mn | <5   | <5       | 50                                  |
| Mercury as Hg   | <0.1   | <0.1     | 1                                   |
| Nickel as Ni    | <2   | <2       | 20                                  |
| Selenium as Se  | <1   | <1       | 10                                  |

*The results obtained show that the sample **complies** with the requirements of BS6920:2014 Part 2.6, for the extraction of metals test.*

**Conclusion:-**

Based on the results obtained, the sample is **suitable** for use in contact with water intended for human consumption in accordance with BS6920:2014.

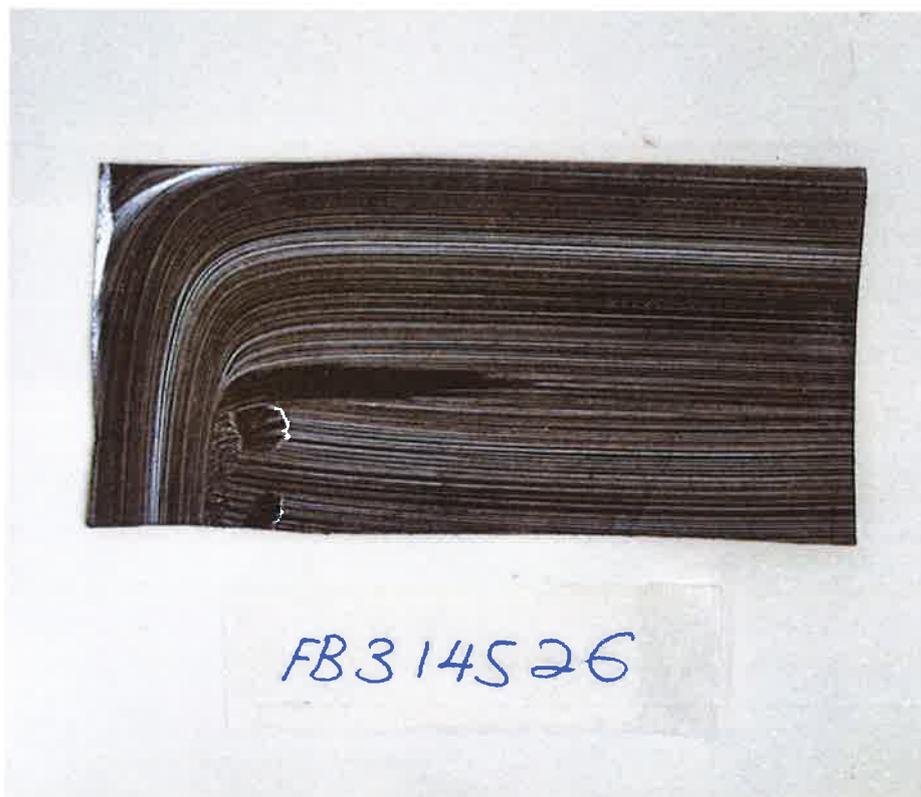


**DONALD JIANG**  
**ASSISTANT MANAGER**  
**BIOLOGICAL & CHEMICAL TECHNOLOGY DIVISION**

FB8500314526

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Sample Image:



A handwritten signature in blue ink, appearing to be "Al".