

# COPENHAGEN TRADE APS

New product  
recommendation

---

Graphene fabric mommy bag

---

# CONTENTS

---

01 — Product introduction

04 — Certificate

02 — Graphene fabric details

03 — Test report



# **Part 01**

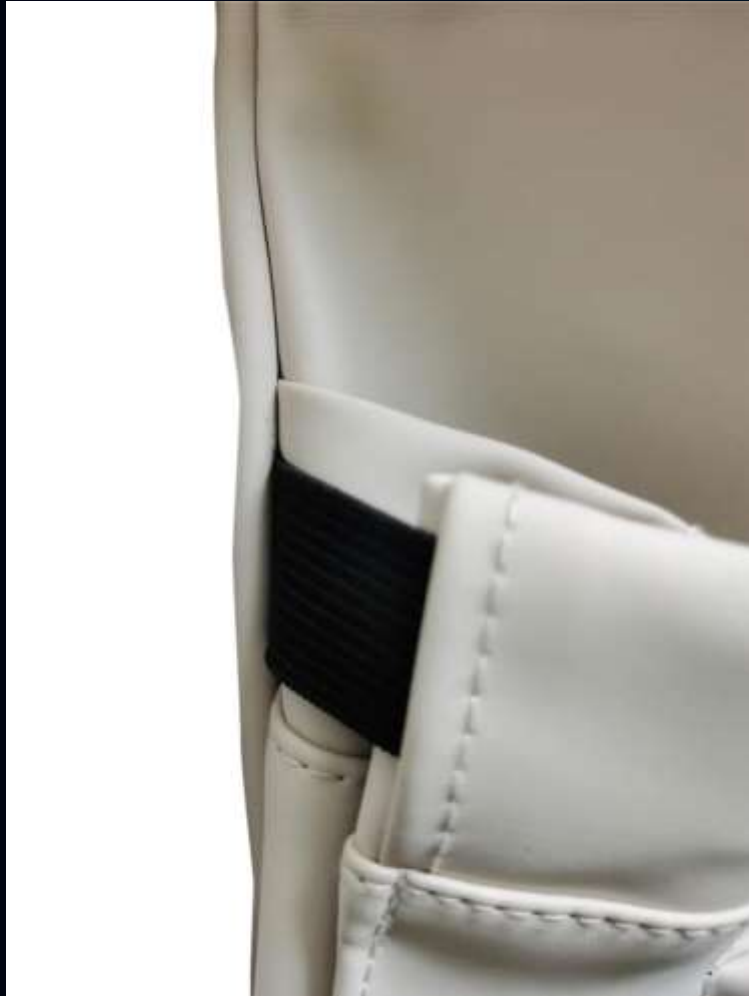
## **Product Introduction**



# Product introduction



# Product introduction





# Product introduction



Side bag opening design, can put paper and other items, easy to take.



This part can be used for baby bottles. The fabric has a good insulation effect.



# Product introduction-internal



Internal graphene fabric



Built-in insulation layer



## Other styles





# Part 02

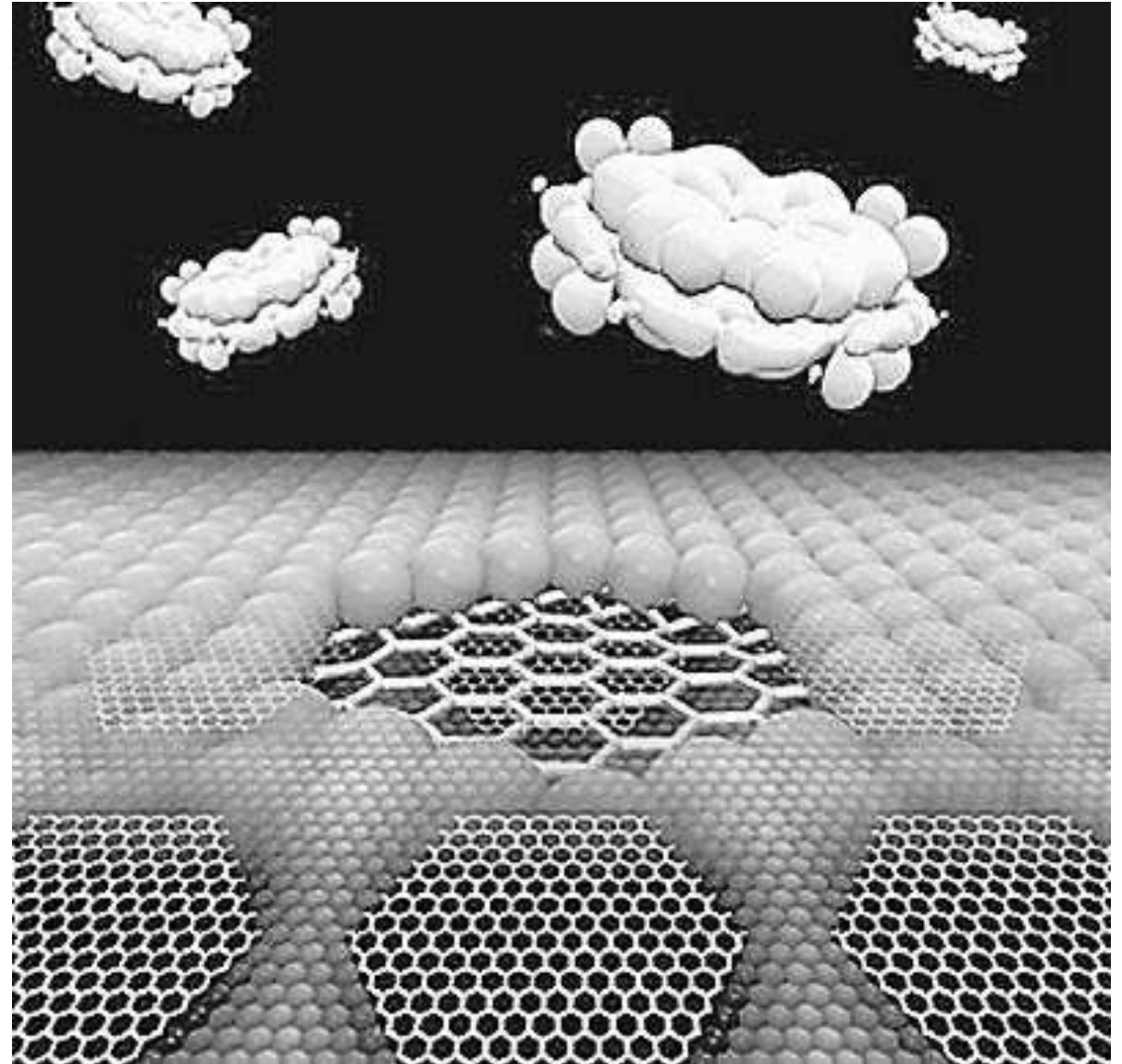
**Graphene fabric details**



# Graphene fabric

Graphene is the thinnest and strongest material in nature. It is 200 times stronger than steel, but it is also very elastic and can stretch up to 20 % of its size.

As a new type of nanomaterial with the thinnest, strongest and strongest conductivity and thermal conductivity found so far.



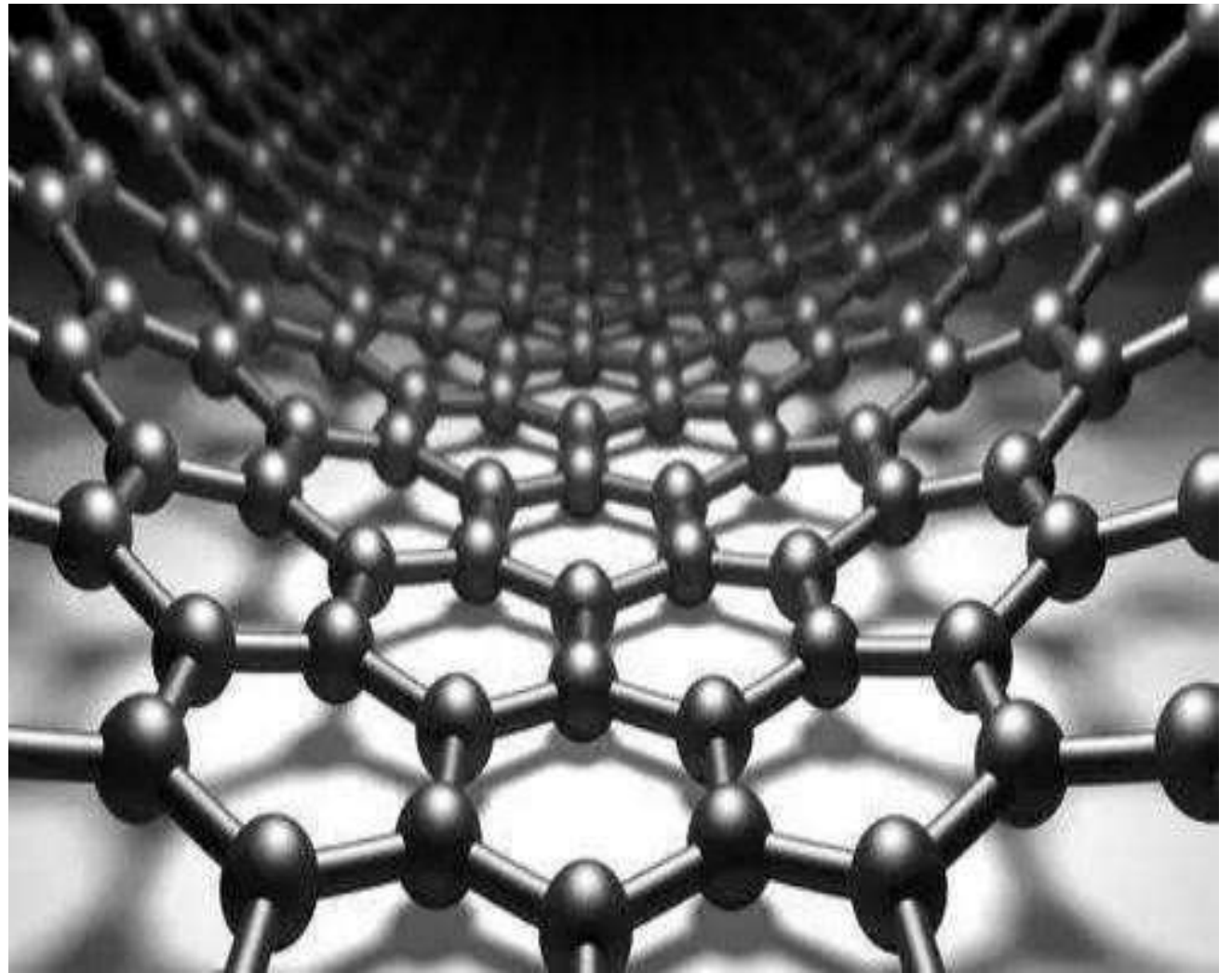


# Graphene fabric features

1.. Graphene has a stable structure, which enables it to be made into a very thin material. At the same time, it is also very strong in toughness, 200 times that of the steel of the same grade.

2.. The fiber structure is almost transparent, and the thermal conductivity is better than diamond and nanotube.

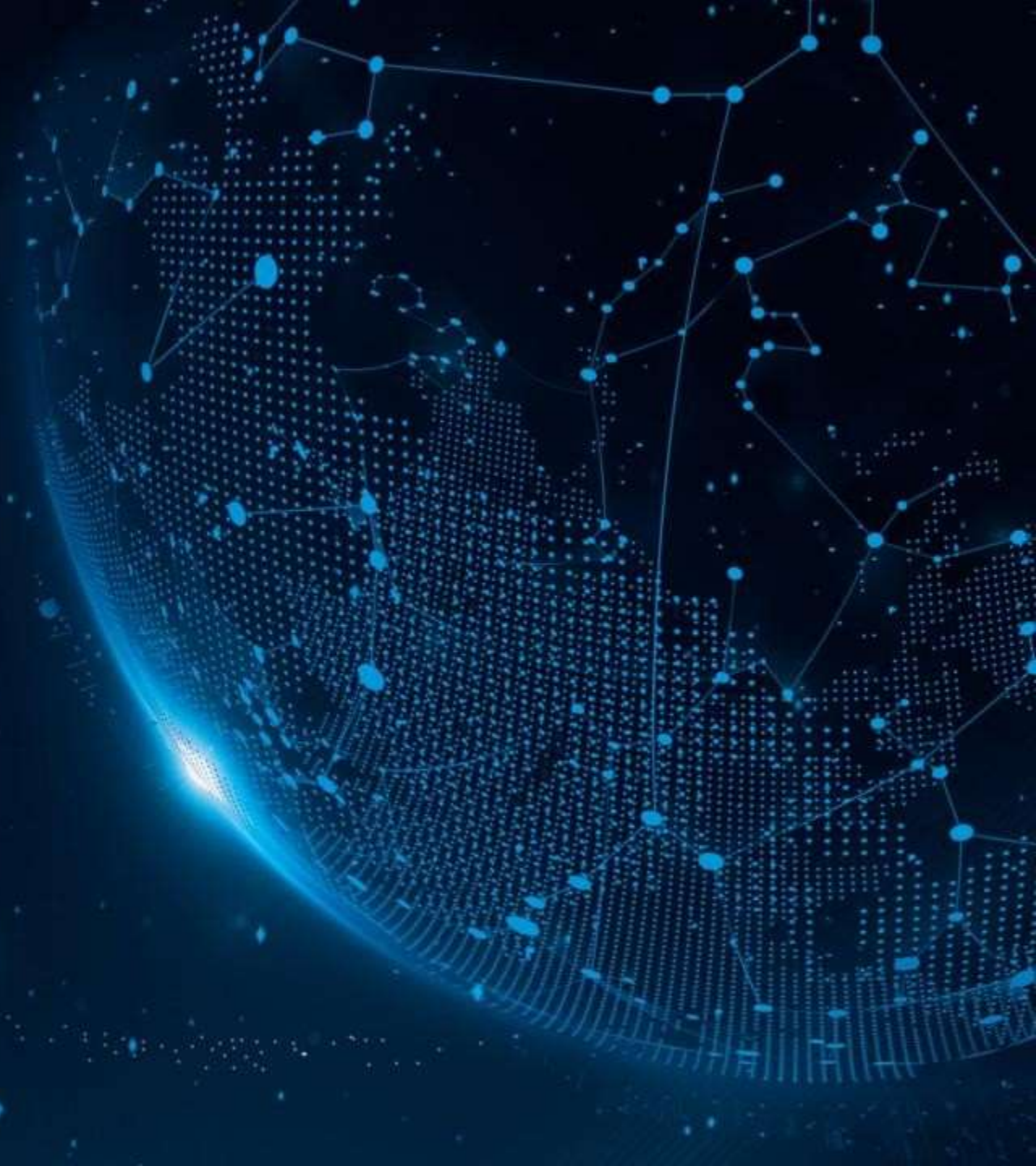
3.. It has enhanced cellular immune function, and has the effect of anti-inflammatory and inhibiting bacteria.





# **Part 03**

**Test report**



# Test report

This report consists of three pages (The body of which is 1 page, picture 1 page, sheet 0 page)

Report Number	20170408-1	Inspection Date	April 8, 2017
Sample Number	HDBG-1	Sample Quantity	1 Piece
Sample Appearance	Black Powder	Test Items	Raman Spectrum
Test Equipment	Horiba JY HR800 Laser Confocal Microscope Rapp Spectrometer		
Test Standard	JY/T 002-1996 General Rules for Laser Raman Spectral Analysis Methods JJG 002-1996 Laser Raman Spectral Verification Procedures		

## Test Results

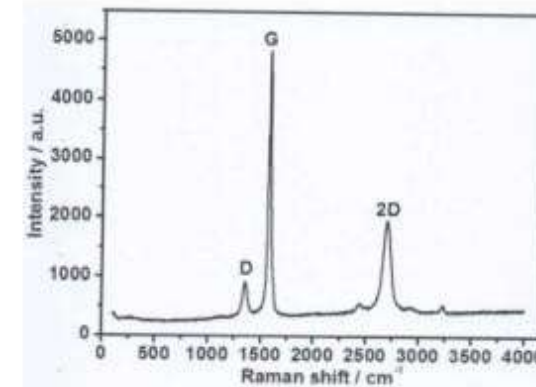
Raman peak of biomass graphene material samples: D Peak(1347.6  $\text{cm}^{-1}$ ) G Peak(1574.8-1) and 2D Peak(2692.5-1). After deducting the base, the ratio of G peak and D peak strength is  $I_G/I_D=7.0$

Test Method:

Using Ar<sup>+</sup> ion laser 514nm wave length, raster 1800 thread.

Test Range 100~4000 $\text{cm}^{-1}$ .

Sample Spectra:





# Test report



## 广东省微生物分析检测中心

GUANGDONG DETECTION CENTER OF MICROBIOLOGY

### 分析检测报告

REPORT FOR ANALYSIS



报告编号 (Report No.): 2020FM09350R01D 校验码 (Verification Code): 16294750

样品名称 Name of Sample	石墨烯凝胶汗布 Viscose jersey with biomass graphene	检测类型 Test Type	委托检测 Entrustment Test
委托单位 Applicant	山东圣泉新材料股份有限公司 Shandong Shengquan New Materials Co., Ltd.	地址 Address	山东省章丘市刁镇工业开发区 Diaozhen Industrial Development Zone, Zhangqiu city, Jinan, Shandong Province, China
样品来源 Sample Source	委托方送检 Submitted for Testing by the Applicant	样品数量 Sample Quantity	1 块 One Sample Submitted
样品规格和批号 Spec and Lot No of Sample	50S/1 SMX R+30D F 凝胶汗布 YM 170G/m <sup>2</sup> 165CM	样品状态和特性 State and Characteristic	—
接样日期 Sample Received Date	2020-04-09	检测完成日期 Completion Date	2020-04-30
检测依据和方法 Test Standard and Method	ISO 18184: 2014 (E)		
检测项目 Item Tested	抗病毒活性试验 Antiviral activity test		
检测结论 Test Conclusion	该样品所检项目的实验数据见本检测报告续页。 The test data of the sample(s) is attached to the page(s) of this report.		
备注 Remarks	<div style="text-align: right;">                       签发日期: 2020-05-07                      Issue Date:                 </div>		

制表  
Editor

陈颖婷

审核  
Verifier

孙延东

批准  
Approver

林保



## 广东省微生物分析检测中心

GUANGDONG DETECTION CENTER OF MICROBIOLOGY

### 分析检测结果

ANALYSIS AND TEST RESULT

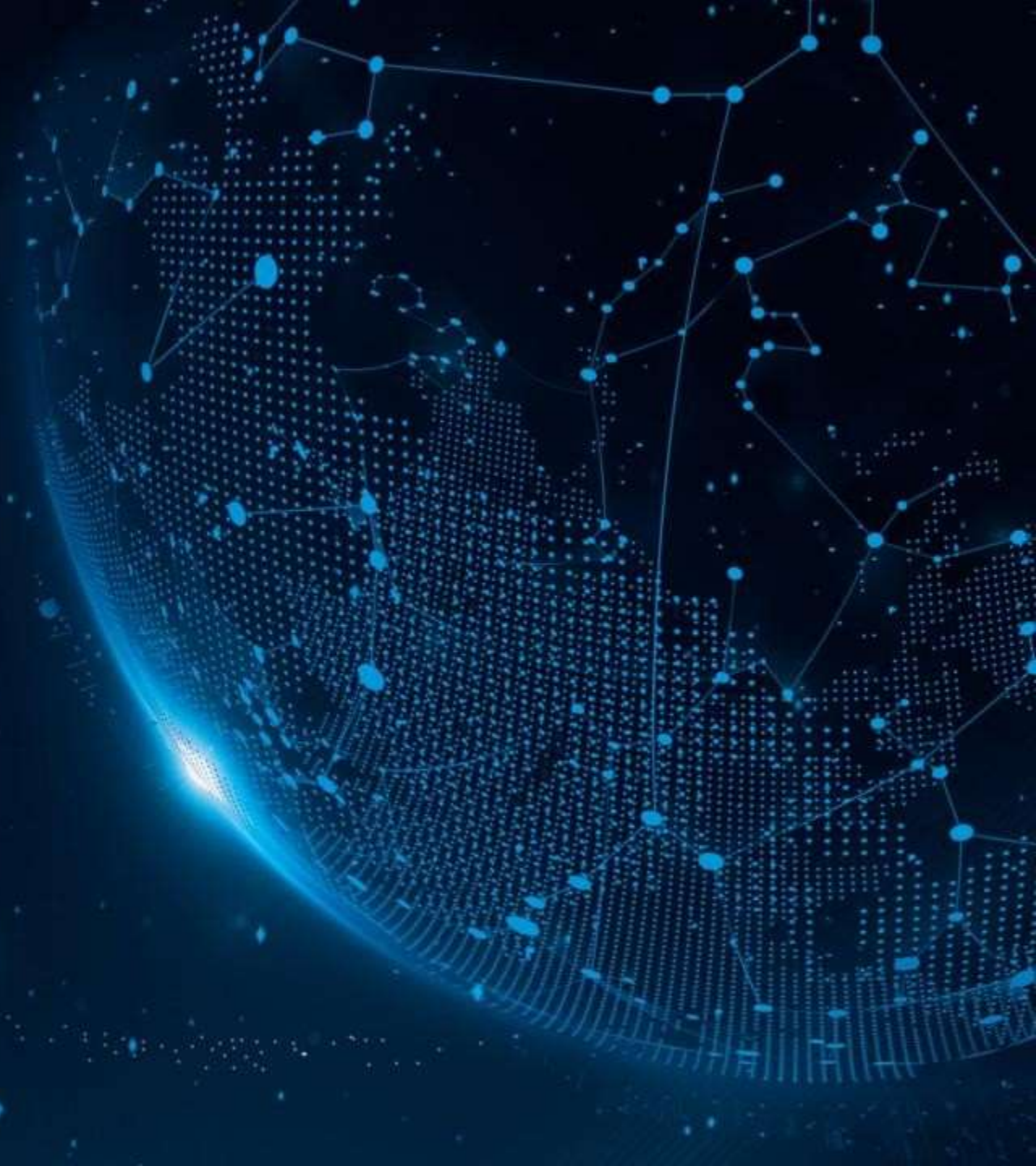
报告编号 (Report No.): 2020FM09350R01D

病毒名称 Virus	实验 序号 No.	对照样接种孵育 0h 后 病毒浓度的对数值 The logarithm of infectivity titre value immediate after inoculation of the reference specimen (lgTCID <sub>50</sub> /bottle)	对照样接种孵育 24h 后病毒浓度的对数值 The logarithm of infectivity titre value after 24h contacting with the reference specimen (lgTCID <sub>50</sub> /bottle)	试样接种孵育 24h 后病毒浓度的对数值 The logarithm of infectivity titre value after 24h contacting with the test specimen (lgTCID <sub>50</sub> /bottle)
甲型流感病毒 H1N1 (A/PR/8/34) MDCK 细胞 H1N1 Influenza virus (A/PR/8/34) MDCK	1	6.87	6.63	2.97
	2	6.80	6.59	3.10
	3	6.97	6.50	3.05
lgTCID <sub>50</sub> /bottle 平均数 Average		6.88	6.57	3.04
抗病毒活性值 Logarithm of antiviral activity			3.53	
抗病毒活性率 Antiviral activity rate (%)			99.97	
甲型流感病毒 H3N2 MDCK 细胞 H3N2 Influenza virus MDCK	1	6.71	6.10	2.80
	2	6.73	5.97	2.80
	3	6.63	6.05	2.80
lgTCID <sub>50</sub> /bottle 平均数 Average		6.69	6.04	2.80
抗病毒活性值 Logarithm of antiviral activity			3.24	
抗病毒活性率 Antiviral activity rate (%)			99.94	
(以下空白 Blank below)				



# **Part 04**

## **Certificate**



# Certificate

HOHENSTEIN Textile Testing Institute GmbH & Co. KG  
Schwarzwaldstr. 1, 74057 Balingen, Germany

**OEKO-TEX®**  
INSPIRING CONFIDENCE

## CERTIFICATE

**The company**

**Jinan Shengquan Group Share-holding Co., Ltd.**  
Shengquan Industrial Park, Zhangqiu  
250200 Jinan City, Shandong Province, CHINA

is granted authorisation according to STANDARD 100 by OEKO-TEX® to use the STANDARD 100 by OEKO-TEX® mark, based on our test report 19.0.99337

**OEKO-TEX®**  
CONFIDENCE IN TEXTILES  
**STANDARD 100**  
16.HCN.98704 HOHENSTEIN HTTI  
Based on technical information  
www.oeko-tex.com/standard100



**for the following articles:**

**Fiber made of graphene modified viscose fiber and graphene modified modal fiber, trade name "healfiber", in color black.**

The results of the inspection made according to STANDARD 100 by OEKO-TEX®, Appendix 4, **product class I** have shown that the above mentioned goods meet the human-ecological requirements of the STANDARD 100 by OEKO-TEX® presently established in Appendix 4 for baby articles.

The certified articles fulfil requirements of Annex XVII of REACH (incl. the use of azo colourants, nickel release, etc.), the American requirement regarding total content of lead in children's articles (CPSA, with the exception of accessories made from glass) and of the Chinese standard GB 18401:2010 (labelling requirements were not verified).

The holder of the certificate, who has issued a conformity declaration according to ISO 17060-1, is under an obligation to use the STANDARD 100 by OEKO-TEX® mark only in conjunction with products that conform with the sample initially tested. The conformity is verified by audits.

**The certificate 16.HCN.98704 is valid until 31.12.2020**

Boennigheim, 17.01.2020

  
Dipl.-Ing. (FH) Kerstin Schramm  
Head of Certification Body OEKO-TEX®

OEKO-TEX® Association | Seefelderstrasse 13 | P.O. Box 2006 | CH-9027 Zurich



## Research Result

No: SCT-A2016020-006N1 Page 1

Applicant company: JINAN SHENGQUAN NEW MATERIALS CO., LTD

Sample information: Biomass Graphene fabric 1pc solid

Applicant test projects: Qualitative analysis of biomass graphene

Date: 2016.10.28

Remark: Above informations are supply by applicant company offer and confirm

\*\*\*\*\*

1. Analysis result list:

Analysis Result				
NO.	sample name	analysis term	analysis result	remark
1	Biomass graphene fabric	qualitative analysis of principal components	including biomass graphene components	✓
Remark				
		below blank		