MTPU Fitness Mat

SHINCELL
Committed To Sustainable Foaming Technology

Fitness mat includes: training mat, skipping mat and yoga mat. Yoga postures use ancient and easy-to-master techniques to improve people's physical, psychological, emotional and spiritual state. Which is an exercise of aiming at harmony of both body and mind.

The materials currently used for fitness mats

Rubber

Good resilience, durability, and non-slip performance, but the hands and feet sweat would affect the non-slip performance. Have bad smell and hard to remove; chemical foaming with formamide residues, which are harmful to health.

TPE

Good resilience, durability, and non-slip performance, but it is chemical foaming with formamide residues, which are harmful to health.

PU Rubber

Water-absorbing and breathable, good anti-slip effect but stains easily and difficult to clean. Chemical foaming with formamide residue, which is harmful to health.

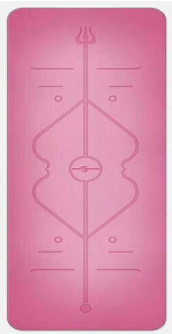
NBR

Good resilience, but with bad anti-slip and rebounce performance. Failure to control the calcium oxide ratio during the processing, it may cause skin allergies or burning sensation. Chemical foaming with formamide residues, which are harmful to health.

PVC

Gradually eliminated by the market because of its poor tear resistance and lack of elasticity and the skins will fall off easily after long use.

Comparison of Foaming Technology



Properties	TPU of SCF Foaming	PVC	PU	NBR	TPE	Artificial rubber	Natural rubber
Use of chemical agents	X	√	√	√	√	√	X
Use of cross-linking agents	X	√	√	√	√	√	X
Odour	X	√	X	√	√	√	√
Carcinogen (formamide) residue	X	√	√	√	√	√	X
Plasticizer residue	X	√	√	X	X	X	X

X : NO
√ : Yes

Why choose MTPU mat?

✓TPU raw granules have good wear resistance, high energy rebound, and excellent chemical resistance. TPU are widely used in various fields.

✓TPU is the abbreviation of thermoplastic elastomer, one of the PU catagories. With high tension, high tensile strength, toughness and aging resistance, TPU is a mature environmental friendly material.

✓As an elastomer, TPU SCF sheets have characteristics between that of rubber and plastic. It is oil, water, and mold-resistant. TPU products have outstanding load-bearing capacity, impact resistance and shock absorption performance. More importantly, it is 100% recyclable.

✓TPU belongs to the synthetic resin, and the TPU foam sheets are made by extrusion molding and supercritical fluid foaming. This material become soft under certain temperature, but remain unchanged at room temperature, acting as a stable support.

Comparison of SCF TPU with traditional chemical foaming EVA

检验项目 Test Items	测试方法 Test Method	单位 Unit	MTPU foam	Traditional EVA foam
密度 Density	ISO 845:2006	g/cm3	0.1-0.2	0.2-0.3
永久压缩变形 Compression Set	ASTM D395	%	20-35	≥45%
拉伸强度 Tensile Strength	ISO 1798:2008	MPa	4-7	1.5-4
断裂伸长率 Elongation at Break	ISO 1798:2008	%	300-600	200-400
落球回弹 Ball Resilience	ASTM D3574	%	60-70	45-55

Shincell SCF tech. makes production in cycle possible!

The R&D team has been focusing on the industrialization of supercritical fluid foaming technology for 20 years. With self-developed supercritical foaming process and complete sets of manufacturing equipments(patented), Shincell team won the first prize of the 2020 Shanghai Science and Technology Award.

Shincell yoga mat are produced by TPU microcellular integrated foaming (not popcorn foaming). Supercritical foaming tech (SCF). uses ONLY CO2 and N2 as the blowing agent, no chemical agents, no crosslinking. A purely physical/environmental manufacturing process!

上海市科学技术奖

证 书

为表彰上海市科技进步奖获得者，特颁发此证书。

项目名称：高性能聚丙烯微孔发泡材料绿色制备过程的优化和强化

获 奖 者：姜修磊

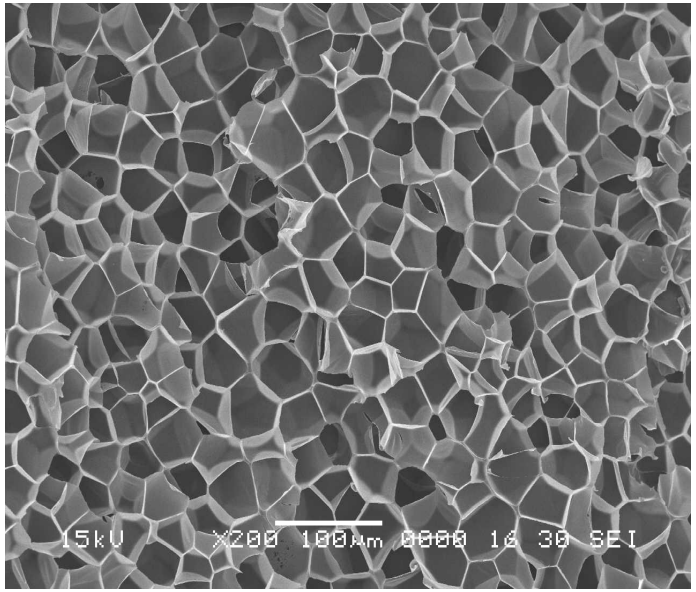
奖励等级：一等奖

上海市人民政府

2020年04月02日

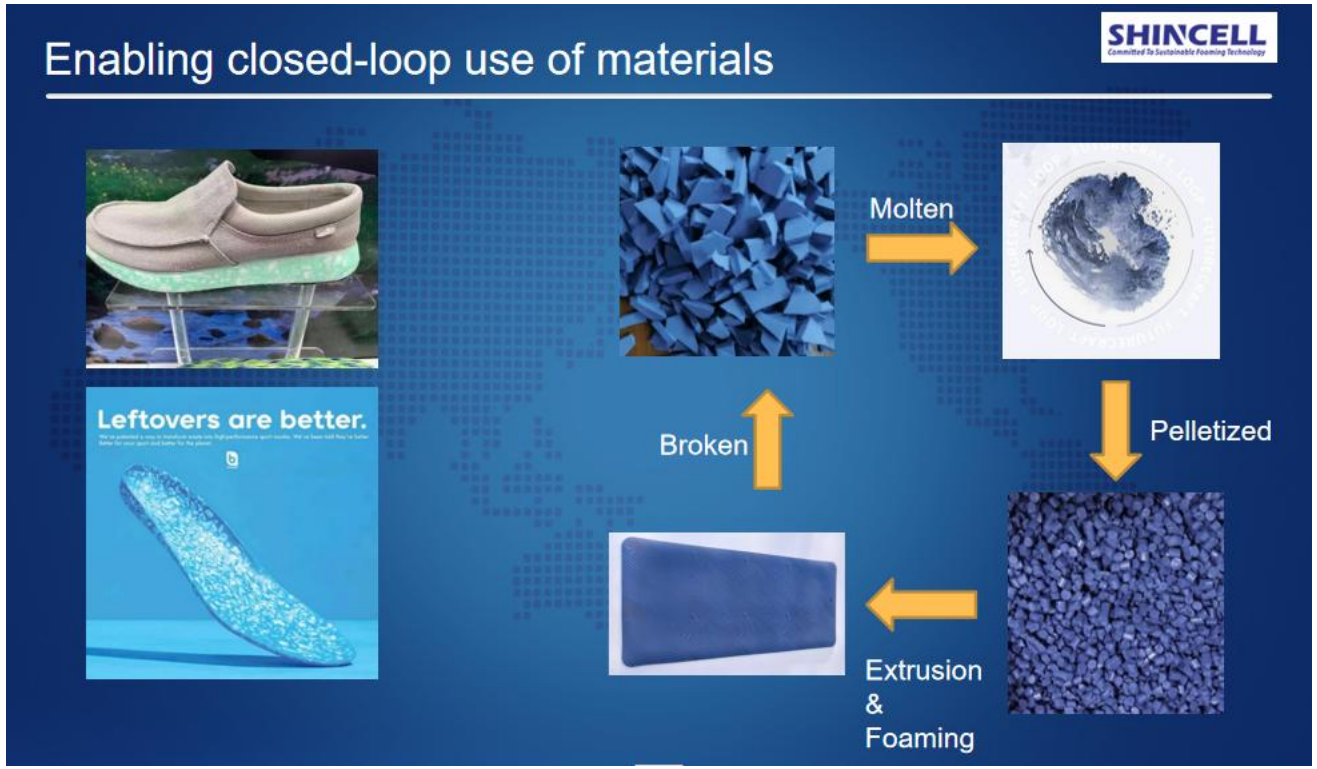
证书号：20194020-1-R05

The first prize of the 2020 Shanghai Science and Technology Award.



MTPU-M for microcellular, the cells are closed-cell, honeycomb structure with each honeycomb 40~60um.

Shincell SCF tech. makes production in cycle possible!



Control Union Certifications B.V.
Meeuwenlaan 4-6,8011 BZ,Zwolle ,Netherlands,NL
+31 38 426 0100
www.controlunion.com

SCOPE CERTIFICATE

Scope Certificate Number: CU1150481GRS-2022-00142501

Control Union Certifications certifies that

Suzhou Shincell New Materials Co., Ltd.
License Number: CB-CUC-1150481
1#Zone5, 20 Datong Road, Suzhou High-tech Zone
215000 Suzhou,Jiangsu Sheng,CN-JS,China, CN

has been audited and found to be in conformity with the
Global Recycled Standard (GRS)
- Version 4.0-

Product categories mentioned below (and further specified in the product appendix) conform with the standard(s)
Product categories:Functional accessories (PC0017)

Process categories carried out under responsibility of the above-mentioned company for the certified products cover:
Collecting (PR0005), Extrusion (PR0010), Mechanical recycling (PR0017), Non-woven manufacturing (PR0019), Trading (PR0030)
*The processes marked with an asterisk may be carried out by subcontractors.

This certificate is valid until:
2023-09-19

Place and date of issue:
2022-09-20,Zwolle

Stamp of the issuing body

Standard's Logo
Global Recycled Standard

Logo of the accreditation body
ISO/IEC 17065
CP 004-01

Name of authorised person
On behalf of the Managing Director
Lifu Wang|Certifier

This Scope Certificate provides no proof that any goods delivered by its holder are GRS certified. Proof of GRS certification of goods delivered is provided by a valid Transaction Certificate (TC) covering them.
The issuing body may withdraw this certificate before it expires if the declared conformity is no longer guaranteed.
Accredited by: Sri Lanka Accreditation Board (SLAB), Accreditation No: CP 004-01

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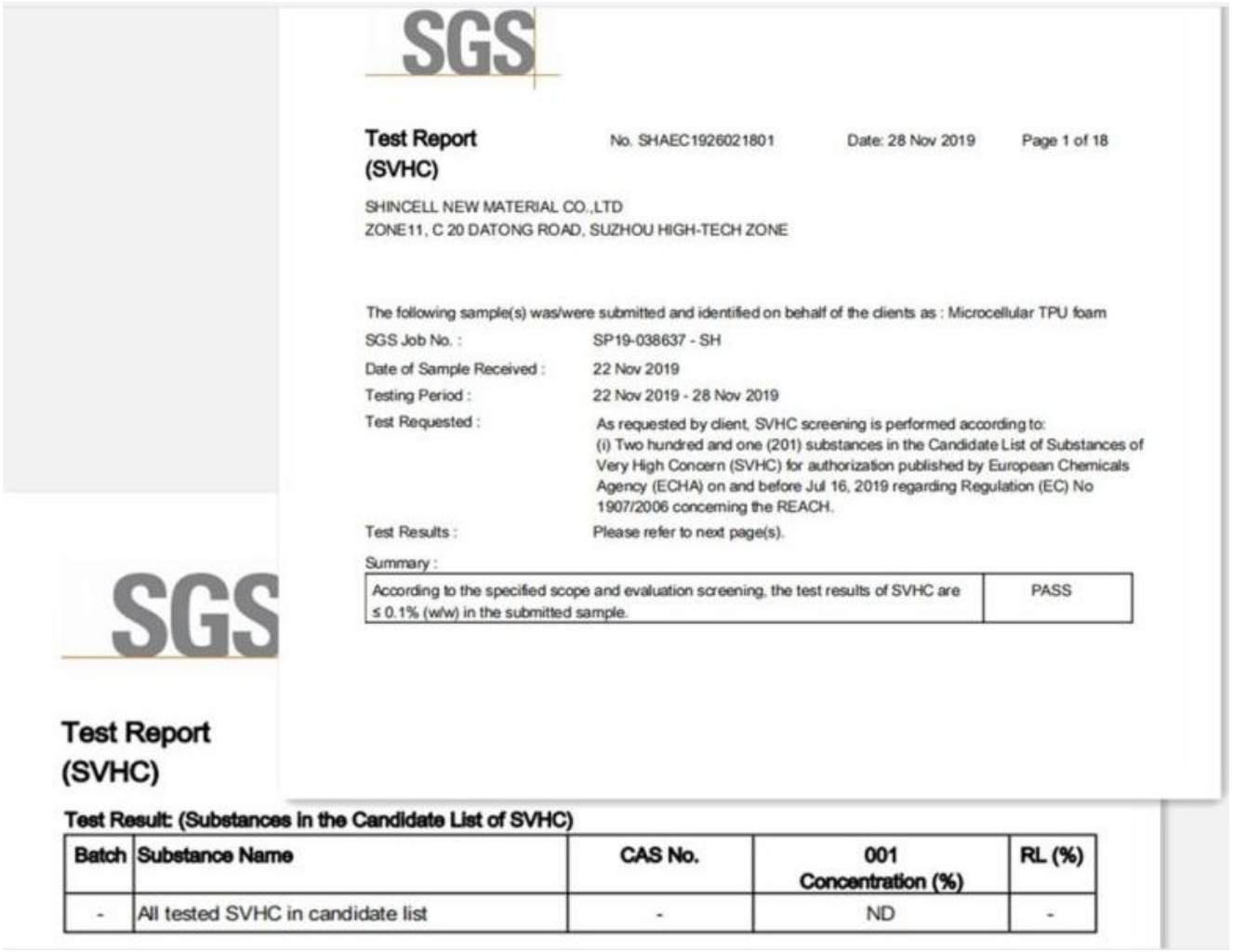
This is electronically issued document is the valid original version.

Scope Certificate CU1150481GRS-2022-00142501 and License Number CB-CUC-1150481 Page 1 /

Recycling and GRS

The Reach Test result of MTPU foam, none of the 201 SCHC(Substances of Very High Concern) is detected!
Shincell truly defines what is real safe!



SGS

Test Report No. SHAEC1926021801 Date: 28 Nov 2019 Page 1 of 18
(SVHC)

SHINCELL NEW MATERIAL CO.,LTD
ZONE11, C 20 DATONG ROAD, SUZHOU HIGH-TECH ZONE

The following sample(s) was/were submitted and identified on behalf of the clients as : Microcellular TPU foam

SGS Job No. :	SP19-038637 - SH
Date of Sample Received :	22 Nov 2019
Testing Period :	22 Nov 2019 - 28 Nov 2019
Test Requested :	As requested by client, SVHC screening is performed according to: (i) Two hundred and one (201) substances in the Candidate List of Substances of Very High Concern (SVHC) for authorization published by European Chemicals Agency (ECHA) on and before Jul 16, 2019 regarding Regulation (EC) No 1907/2006 concerning the REACH.
Test Results :	Please refer to next page(s).

Summary :

According to the specified scope and evaluation screening, the test results of SVHC are ≤ 0.1% (w/w) in the submitted sample.	PASS

SGS

Test Report
(SVHC)

Test Result: (Substances in the Candidate List of SVHC)

Batch	Substance Name	CAS No.	001 Concentration (%)	RL (%)
-	All tested SVHC in candidate list	-	ND	-

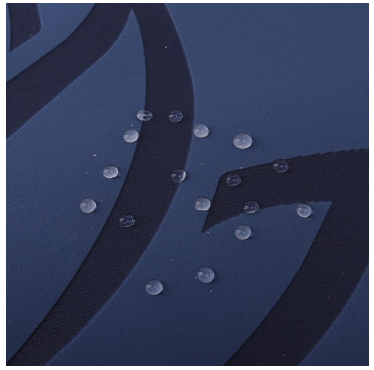
Other Merits

Washable, scrub, use detergents, etc

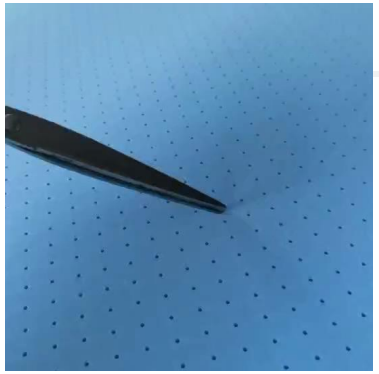
Good performance of compression set = non-collapsing after long-term use

Good wear resistance
Long-term use without debris

Good wear resistance
Without scratches after nail scratch

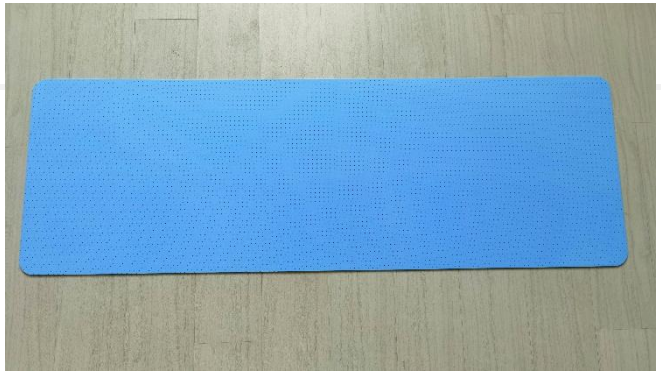


Long-term use without feeling sticky



Dense structure
Protective from sharp items

Light-weight
1.2Kg
easy to carry



Lays flat easily, won't wrinkle or curl

Different types of MTPU Mats

Fitness Mat

Skipping Mat

Meditation Mat

Contact us

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安徽 安庆

- Amanda Xu 18015516838
- E-mail: contact@shincell.com

Shincell Vision

Committed to sustainable foaming technology, Shincell is aiming to become a global leading supplier of high-performance lightweight materials and their solutions!

SHINCELL
Committed To Sustainable Foaming Technology