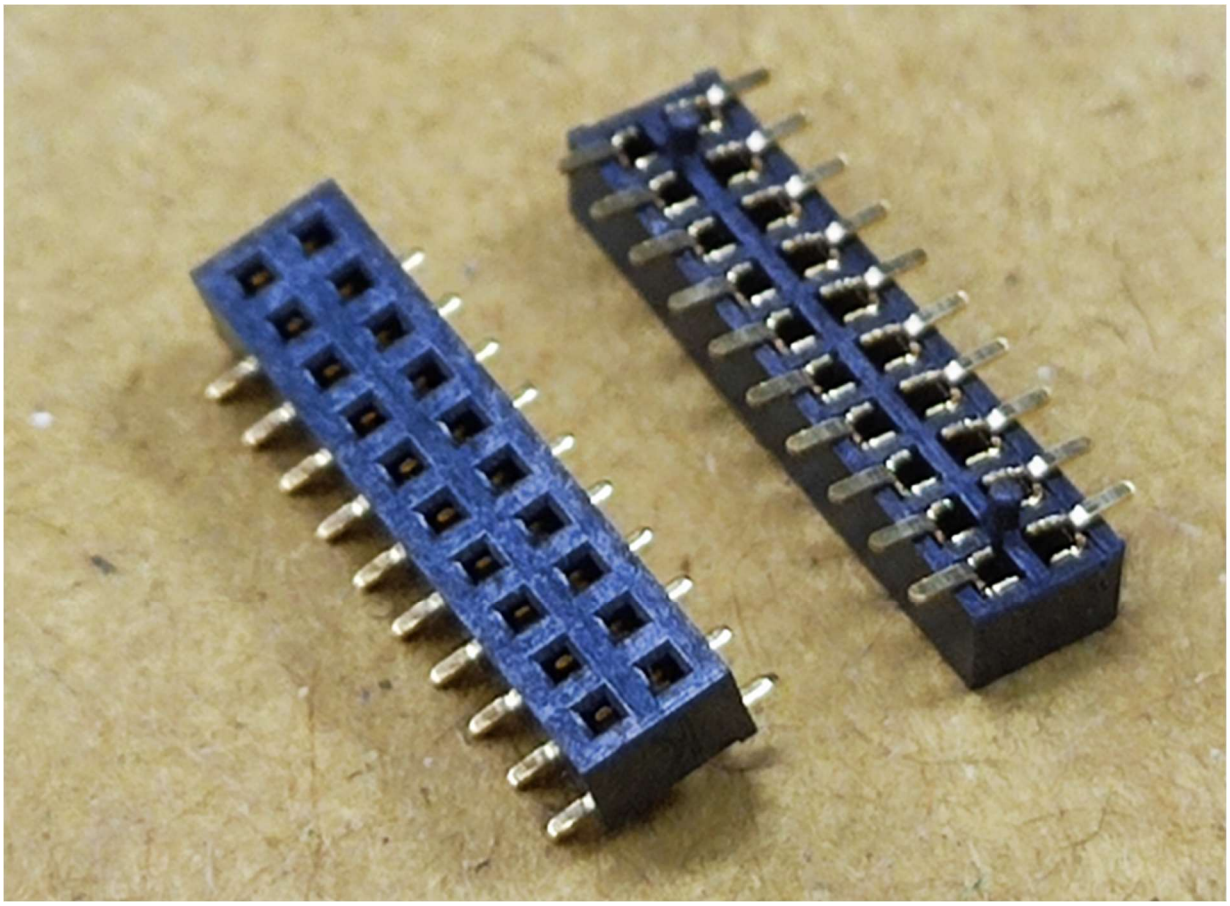
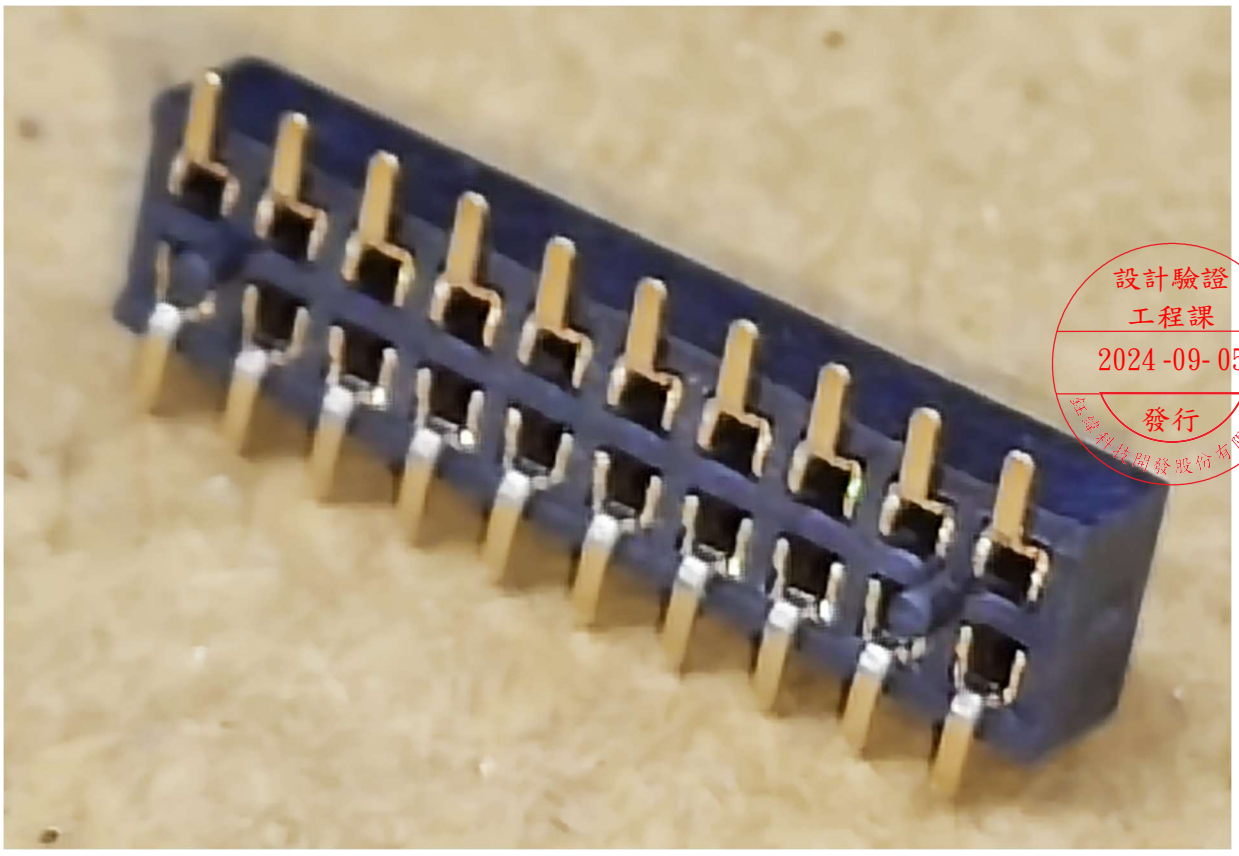




設計驗證
工程課
2024-09-05
發行
[illegible]科技開發股份有限公司

SUPERIOR TECH CO., LTD.

承 認 書
CUSTOMER APPROVAL SHEET

Customer:	鈺緯科技股份有限公司
Description:	Female Header PH1.27 SMT
Customer's P/N:	3FF02016310(F0303)
Superior's P/N:	FHCD-SS020G1NBWL-P
Date:	2024/08/27
Document No:	AVL-408-0008

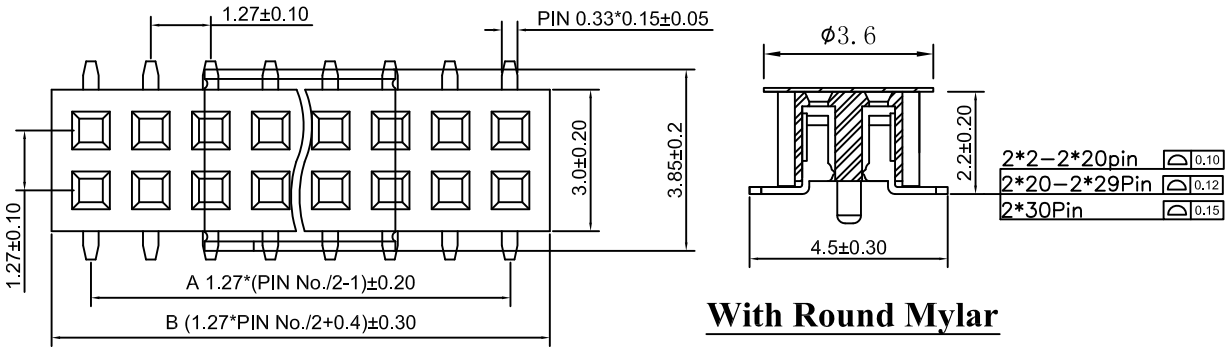
出 圖 DRAWING		
發行 MADE	檢查 CHECKED	承認 APPROVED
Jacky	Tom	Tom
日期 DATE:2024.08.27		

承 認 印 CUSTOMER APPROVE
設計驗證 工程課 2024-09-05 發行 鈺緯科技開發股份有限公司
日期 DATE:

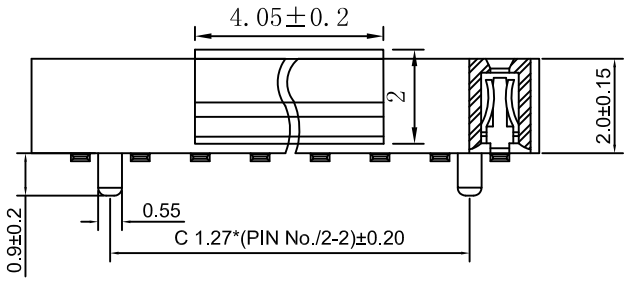
竣豪電子股份有限公司 SUPERIOR TECH CO.,LTD.
地址:新北市三重區重新路5段609巷16號6樓之2
Tel:886-2-2278-7316 Fax:886-2-2278-7301

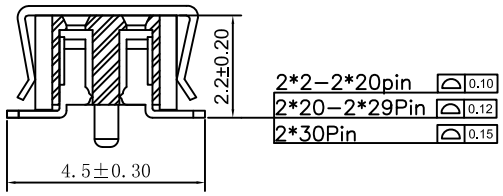
(Q2-R01-11A)

REV.	DESCRIPTION	DATE
A	New Drawing	2024/07/04



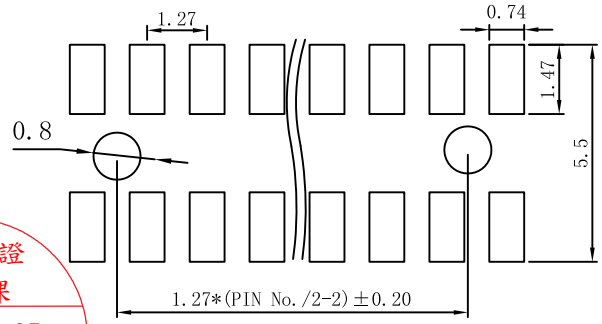
With Round Mylar





With Cap

LTR	Part Name	Material	Description	QTY
1	Housing	LCP UL94V-0	260°C for 10 Seconds . Initial : 1000M Ohms Min. After Test : 500M Ohms Min.	1
2	Contact	Phosphor Bronze	Current Rating : 1.0A Initial : 20m Ohms Max. After Test : 40m Ohms Max.	XX
3	Cap	SUS304	Plating Nickel	1
4	Mylar	Polyimide Tape	250°C-SHORT TERM	1
Temperature Rating : -40°C ~ +105°C . Dielectric Withstanding Voltage : 500V AC/Min .				



P.C.B LAYOUT

FHCD-SSXXXG1NBWL-X

PCB Contact Type

S	S MT

DO Dimension

S	4.5mm

Number of Contact
04 to 60 contacts

Contact Plating
G1 Gold Flash

Plastic Base: (H x W)

N	2.0 x 3.0 mm

Base Color

B	Black

Plastic

L	LCP

W	With locating Peg

Packing

C	Tube
D	Tube+Cap
E	Reel+Cap
P	Reel+Round Mylar

設計驗證
工程課
2024-09-05
發行
旺豪科技開發股份有限公司

RoHS compliant

竣豪電子股份有限公司
Superior Tech Co., Ltd.

General Tolerance	
X. ± 0.30	
.X ± 0.20	
.XX ± 0.15	
.XXX ± 0.1	
角度	± 5°

TITLE	Pitch 1.27x1.27mm Female Header SMT,Dual Row		
DRAWN	Jacky	DATE 07-04-24'	NO. T169
CHECK	Tom	DATE 07-04-24'	PART NO. FHCD-SSXXXG1NBWL-X
APPROVED	Tom	DATE 07-04-24'	CUSTOMER NO. 3FF02016310(F0303)

REV.	UNIT	SCALE
A	mm	1:1

(Q2-R03-01A) ST-R05-07

SPECIFICATION AND PERFORMANCE
TALBE OF CONTENT

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Rev	Date	Description	Edited by	Approvals
A	2011/11/15	Issue	Dengxuihui	Prepared: Yang Hong
				Checked: Fang Ling
				Approved: David

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1. Scope:

This specification covers the requirements for product performance, test methods and quality assurance provisions of **Female Header P1.27 connector**

2. Reference Documents:

The following documents form a part of this specification to the extent specified herein. Unless otherwise specified, the latest edition of the document applies. In the event of conflict between the requirements of this specification and the product drawing, the product drawing shall take precedence. In the event of conflict between the requirements of this specification and the referenced documents, this specification shall take precedence.

A.EIA-364: The Test Sequence and Test Procedures for Electrical Connectors and Sockets.

B.UL Std-94: Test of Flammability of Plastic material for Parts in Devices and Appliances.

3. REQUIREMENTS:

3.1 Material of Components:

A. Housing: Thermoplastic, UL94V-0 Rated

B. Contact: Copper Alloy

3.2 Design and Construction:

Product shall be of the design, construction and physical dimensions specified in the applicable product drawing.

3.3 Ratings:

A. Voltage:	125Vrms maximum
B. Current:	1.0A
C. Temperature:	-40~105℃

4. Performance and Test Descriptions:

The product is designed to meet the electrical, mechanical and environmental performance requirements specified in paragraph 5. Unless otherwise specified, all tests are performed at ambient environmental conditions.

5.Test Requirements and Procedures Summary:

Electrical Performance		
Test Description	Test Procedures & Condition	Requirements
Examination Of Product	Meets requirements of product drawing and ST specification.	Visual in specification No Physical damage.
Low Level Contact Resistance	EIA 364-23 The object of this test procedure is to detail a standard method to measure the electrical resistance across a pair of mated contacts such that the insulating films, if present, will not be broken or asperity melting will not occur. Subject mated contacts assembled in housing to closed circuit current of 100 mA maximum at open circuit at 20 mV maximum.	1.Initial:20 mΩ max 2.After Test:40 mΩ max
Insulation Resistance	EIA 364-21 The object of this test procedure is to detail a standard method to assess the insulation resistance of connectors. This test procedure is used to determine the resistance offered by the insulation materials and the various seals of a connector to a DC potential tending to produce a leakage of current through or on the surface of these members. Measure by applying test potential between the adjacent contacts, and between the contacts and ground in the mated connector assemblies. Test Voltage: 500 Vdc.	1000MΩ minimum

Test Description	Test procedures & Condition	Requirements
Dielectric Withstanding Voltage	EIA 364-20 The object of this test procedure is to detail a test method to prove that a connector can operate safety at its rated voltage and withstand momentary over potentials due to switching, surges and / or other similar phenomena. Measure by applying test potential between the adjacent contacts, and between the contacts and ground in the mated connector assemblies. Test Potential: 500Vac at sea level Test Duration: 60 seconds	1. No flashover, No sparkover, No excess leakage, No breakdown 2. Current leakage ＜0.5mA

Mechanical Performance		
Test Description	Test Procedures & Condition	Requirements
Flammability	UL 94V-0 This procedure is to ensure thermoplastic resin compliance to UL flammability standards.	The manufacturer will require its thermoplastic resin vendor to supply a detailed C of C with each resin shipment. The C of C shall clearly show the resin's UL listing number, lot number, date code, etcetera.
Contact Retention	EIA 364-29 The object of this test is to detail a standard method to assess the ability of the contact retaining system to withstand the axial mechanical stresses likely to be encountered during normal usage. Subject unmade connector to measure the axial seating load forces required taking up any slack of the contact in its retention system. Apply an axial load to the contact at a rate of approximately 1lbs per second. Record by using autograph.	1. 60gf/per pin min 2. No movement from normal position.
Mating and Unmating force	EIA 364-13 The object of this test is to detail a standard method for determining the mechanical forces required for inserting a Female Header P1.27 connector. Subject Female Header P1.27 connector to mate and unmate to measure the mechanical forces required to engage and disengage at a rate of 12.5 mm per minute. Record by using autograph.	1. Mating force : 60gf/per pin max 2. Unmating force : 14gf/per pin min

Test Description	Test Procedures & Condition	Requirements
Durability	EIA 364-09 The object of this test procedure is to detail a uniform test method of determining the effects caused by subjecting a connector to the conditioning action of insertion and extraction, simulating the expected life o the connectors. Durability cycling with a gauge is intended only to produce mechanical stress. Durability performed with mating components is intended to produce both mechanical and wear stress.	1. 50 insertion / extraction cycles at a maximum rate of 100cycles per hour. 2. No evidence of damage. 3. The electrical performances should meet the spec. Specified.
Solderability	EIA 364-52 Category 3 The object of this test procedure is to detail a uniform test method for determining connector solder ability. The test procedure contained herein utilizes the solder dip technique. It is not intended to test or evaluate solder cup, solder solder eyelet, other hand-soldered type or SMT type terminations. Subject unmated connectors should be tested according to the listed below: Steam Aging Temperature : 90~96℃ Steam Aging Duration : 8 hours±5min Soldering Temperature : 245±5℃ Soldering Time: 4~5 seconds Flux: Unactivated Not the withstanding temperature of plastics	Continuous solder coating with a minimum 95% coverage.

Environmental Performance		
Test Description	Test Procedures & Condition	Requirements
Humidity (Temperature Cycling)	EIA 364-31 Method III Test Condition A The object of this procedure is to detail a standard test method for the evaluation of the properties of materials used in connectors as they are influenced by the effects of high humidity and heat. Subject mated and unmated connectors should be tested according to the condition listed below: Temperature : 25~85℃ Humidity: 90~95%(R.H) Duration: 96 hours	1. No evidence of damage. 2. The electrical performances should meet the spec. Specified.
Salt Spray	EIA 364-26 Test Condition A The object for this test procedure is to detail a standard test method to assess the effects of a controlled salt laden atmosphere on connector components, finishes and mechanisms. Subject mated and unmated connectors should be tested according to the condition listed below: Temperature : 35±1.1℃ Humidity: 95~98% (R.H.) PH Value: 6.5~7.2 Duration: 16 hours	1. No evidence of damage. 2. The electrical performances should meet the spec. Specified.
Temperature Life	EIA 364-17 Test Condition 3 Method A The object of this test is to detail a standard test method to assess the ability of a connector to withstand elevated temperatures with or without electrical loading. Subject mated connectors should be tested according to the condition listed below: Temperature : 105±2℃ Duration: 96 hours	1. No evidence of damage. 2. The electrical performances should meet the spec. Specified.

Note : Shall meet visual requirements ,show no physical damage ,and shall meet requirements of additional tests as specified in Test Sequence in paragraph 6 .

6. Product Qualifications and Requalification Test Sequence:

A. Sample Selection:

Test samples shall be prepared in accordance with applicable Instruction Sheets and shall be selected at random from current production.

B. Test Sequence:

The following is an example of how the test sequence works: In Test Group 8, the first test is (1), examination of product, followed by test (2), Temperature Life , followed by test (3), examination of product .Six samples are tested in this test group.

Test Description Sequence	Test Group							
	1	2	3	4	5	6	7	8
Examination of product	1,3	1,3	1,5	1,7	1,9	1,6	1,3	1,3
Low Level Contact Resistance		2,	2,4		2,6	2,4		
Insulation Resistance				2,5	3,7			
Dielectric Withstanding Voltage				3,6	4,8			
Contact Retention	2							
Durability						3		
Solder ability						5		
Humidity				4				
Salt Spray					5			
Temperature Life			3					2
Resistance to Soldering Heat							2	
Sample Size per Test Group	8	8	8	8	8	8	8	6

7. Quality Assurance Provisions:

Unless otherwise specified , in the contract or purchase order , we will be responsible for the quality of the part as it is delivered to client . We will be responsible for having controlled processes to ensure product is in total compliance with this specification .Failing lots shall be subject to return or other corrective action .

Further , ST will not substitute components of the assembly (connector , cable , etc) without prior written approval from client .Any such substitute shall be submitted to client for approval prior to implementation . Substitution shall be deemed as any change in ST different than those previously submitted to and approved by client .

7.1 . Re-qualification Testing :

If changes significantly affecting form , fit or function are made to the product or manufacturing process , product assurance shall coordinate qualification testing , consisting of all or part of the original testing sequence as determined by development / product , quality and reliability engineering .

Acceptance :

Acceptance is based on verification that the product meets the requirement of paragragh 5 . Failures attributed to equipment , test setup or operator deficiencies shall not disqualify the product . When product failure occurs , corrective action shall be taken and samples resubmitted for qualification . Test to confirm corrective action is required before resubmittal .

Inspection Data :

Inspection and test data shall be recorded , evaluated , and maintained as evidence of performance to these provisions .

7.4 Quality Conformance Inspection :

Applicable ST quality inspection plan will specify the sampling acceptable quality level to be used . Dimensional and functional requirements shall be in accordance with the applicable product drawing and this specification .

7.5 Preparation for Delivery :

Overall packaging shall be sufficient to protect against damage or loss during shipment from ST to destination specified in the purchase order.

Test Report

No.: EKR23901470 Date: 04-Oct-2023

POLYPLASTICS TAIWAN CO., LTD.
NO. 13, JIANYE RD., DALIAO DIST., KAOHSIUNG CITY 831, TAIWAN (R.O.C.)

The following sample(s) was/were submitted and identified by the applicant as:

Sample Submitted By	:	POLYPLASTICS TAIWAN CO., LTD.
Sample Name	:	LCP
Style/Item No.	:	E471i BK210P / Lot No.2XH0071

==========

Sample Receiving Date	:	26-Sep-2023
Testing Period	:	26-Sep-2023 to 04-Oct-2023

Test Requested :

(1) As specified by client, with reference to RoHS 2011/65/EU Annex II and amending Directive (EU) 2015/863 to determine Cadmium, Lead, Mercury, Cr(VI), PBBs, PBDEs, DBP, BBP, DEHP, DIBP contents in the submitted sample(s).

(2) As specified by client, to test Halogen-Fluorine, Chlorine, Bromine, Iodine in the submitted sample.

Test Results : Please refer to following pages.

Ray Chang, Ph.D./Department Manager
Signed for and on behalf of
SGS TAIWAN LTD.
Chemical Laboratory-Kaohsiung

PIN CODE: F5AD4F16

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Test Part Description

No.1 : BK210P LCP

Test Result(s)

Test Item(s)	Method	Unit	MDL	Result
				No.1
Cadmium (Cd)	With reference to IEC 62321-5: 2013, analysis was performed by ICP-OES.	mg/kg	2	n.d.
Lead (Pb)	With reference to IEC 62321-5: 2013, analysis was performed by ICP-OES.	mg/kg	2	2.71
Mercury (Hg)	With reference to IEC 62321-4: 2013+AMD1: 2017, analysis was performed by ICP-OES.	mg/kg	2	n.d.
Hexavalent Chromium Cr(VI)	With reference to IEC 62321-7-2: 2017, analysis was performed by UV-VIS.	mg/kg	8	n.d.
Monobromobiphenyl	With reference to IEC 62321-6: 2015, analysis was performed by GC/MS.	mg/kg	5	n.d.
Dibromobiphenyl		mg/kg	5	n.d.
Tribromobiphenyl		mg/kg	5	n.d.
Tetrabromobiphenyl		mg/kg	5	n.d.
Pentabromobiphenyl		mg/kg	5	n.d.
Hexabromobiphenyl		mg/kg	5	n.d.
Heptabromobiphenyl		mg/kg	5	n.d.
Octabromobiphenyl		mg/kg	5	n.d.
Nonabromobiphenyl		mg/kg	5	n.d.
Decabromobiphenyl		mg/kg	5	n.d.
Sum of PBBs		mg/kg	-	n.d.
Monobromodiphenyl ether		mg/kg	5	n.d.
Dibromodiphenyl ether		mg/kg	5	n.d.
Tribromodiphenyl ether		mg/kg	5	n.d.
Tetrabromodiphenyl ether		mg/kg	5	n.d.
Pentabromodiphenyl ether		mg/kg	5	n.d.
Hexabromodiphenyl ether		mg/kg	5	n.d.
Heptabromodiphenyl ether		mg/kg	5	n.d.
Octabromodiphenyl ether		mg/kg	5	n.d.
Nonabromodiphenyl ether		mg/kg	5	n.d.
Decabromodiphenyl ether		mg/kg	5	n.d.
Sum of PBDEs		mg/kg	-	n.d.

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NO. 13, JIANYE RD., DALIAO DIST., KAOHSIUNG CITY 831, TAIWAN (R.O.C.)

Test Item(s)	Method	Unit	MDL	Result
				No.1
Butyl benzyl phthalate (BBP)	With reference to IEC 62321-8: 2017, analysis was performed by GC/MS.	mg/kg	50	n.d.
Dibutyl phthalate (DBP)		mg/kg	50	n.d.
Diisobutyl phthalate (DIBP)		mg/kg	50	n.d.
Di-(2-ethylhexyl) phthalate (DEHP)		mg/kg	50	n.d.
Fluorine (F) (CAS No.: 14762-94-8)	With reference to BS EN 14582: 2016, analysis was performed by IC.	mg/kg	50	117
Chlorine (Cl) (CAS No.: 22537-15-1)		mg/kg	50	n.d.
Bromine (Br) (CAS No.: 10097-32-2)		mg/kg	50	n.d.
Iodine (I) (CAS No.: 14362-44-8)		mg/kg	50	n.d.

Note：

1. mg/kg = ppm ; 0.1wt% = 0.1% = 1000ppm
2. MDL = Method Detection Limit
3. n.d. = Not Detected (Less than MDL)
4. "-" = Not Regulated

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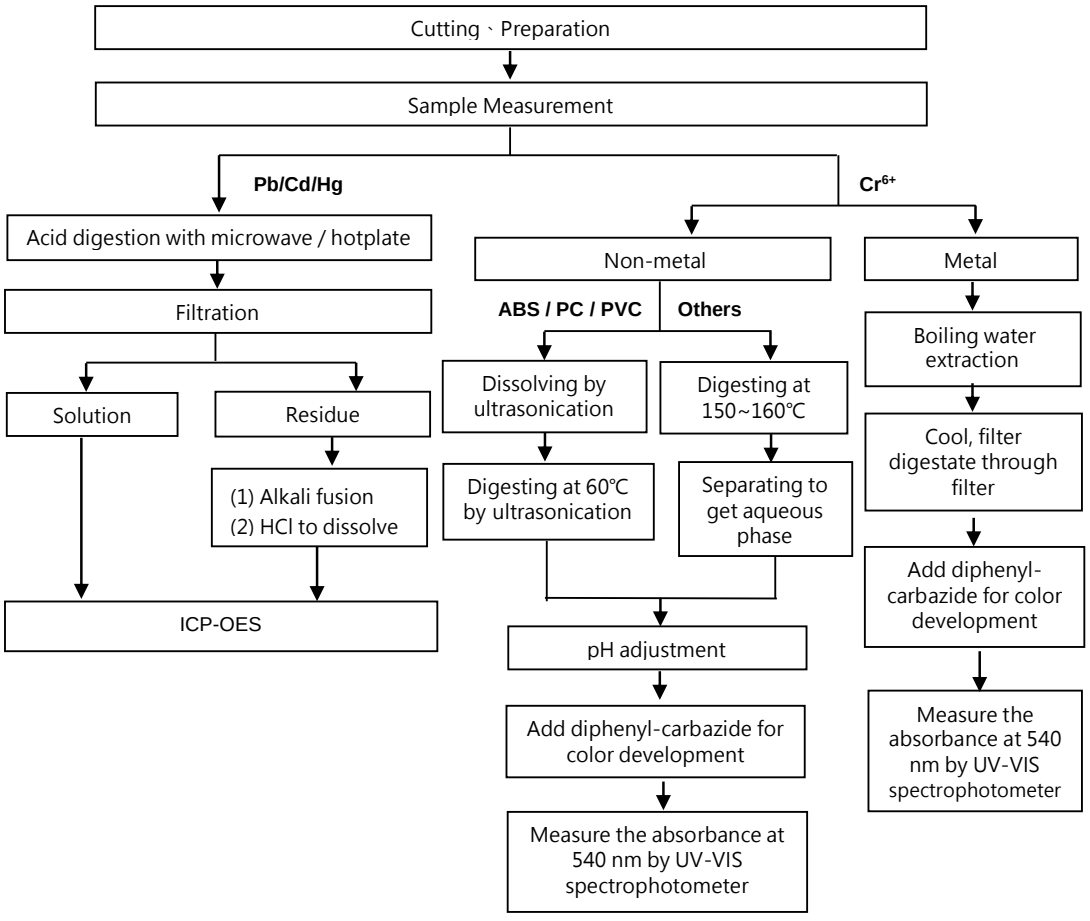
POLYPLASTICS TAIWAN CO., LTD.
NO. 13, JIANYE RD., DALIAO DIST., KAOHSIUNG CITY 831, TAIWAN (R.O.C.)

Analytical flow chart of Heavy Metal

These samples were dissolved totally by pre-conditioning method according to below flow chart.
(Cr^{6+} test method excluded)



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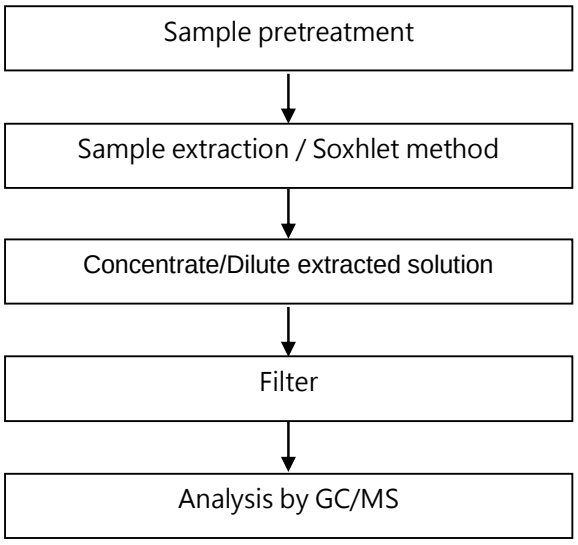
PBB/PBDE analytical FLOW CHART



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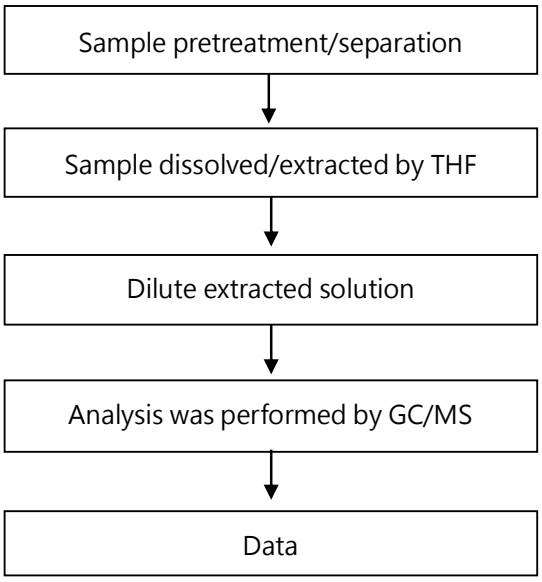
POLYPLASTICS TAIWAN CO., LTD.
NO. 13, JIANYE RD., DALIAO DIST., KAOHSIUNG CITY 831, TAIWAN (R.O.C.)

Analytical flow chart of phthalate content

【Test method: IEC 62321-8】



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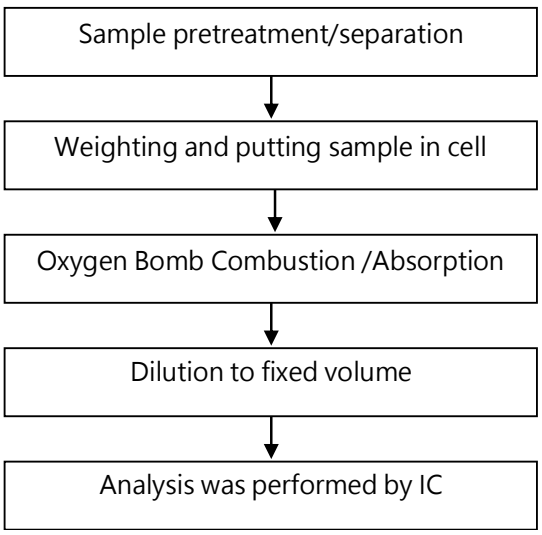
Analytical flow chart of Halogen



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POLYPLASTICS TAIWAN CO., LTD.
NO. 13, JIANYE RD., DALIAO DIST., KAOHSIUNG CITY 831, TAIWAN (R.O.C.)

*** The tested sample / part is marked by an arrow if it's shown on the photo. ***

EKR23901470



** End of Report **

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MATERIAL SAFETY DATA SHEET (MSDS)

Issued: Mar 20 , 2002
Revised: Nov 4 , 2009

File No. 4052-1

1. CHEMICAL PRODUCT & COMPANY IDENTIFICATION

CHEMICAL PRODUCT NAME :	VECTRA® E471i
NAME OF COMPANY :	Polyplastics Co.,Ltd.
SECTION IN CHARGE :	Quality Assurance Dept.
ADDRESS :	2-18-1 Konan, Minato-ku, Tokyo,108-8280 Japan
TELEPHONE NUMBER :	03-6711-8605
FACSIMILE NUMBER :	03-6711-8616

2. COMPOSITION/INFORMATION ON INGREDIENTS

SUBSTANCE/PREPARATION	:	Preparation
COMMON CHEMICAL NAME	:	Aromatic Liquid Crystal Polymer
SYNONYMS	:	Aromatic Liquid Crystal Polymer(LCP)
INGREDIENTS AND COMPOSITION	:	LCP≧ 60%, Glassfiber + Inorganic filler and Others≦ 40%
CHEMICAL FORMURA	:	not open
SERIAL №. IN OFFICIAL GAZETTE	:	not open
CAS №.	:	147310-94-9(base resin)

3. HAZARDS IDENTIFICATION

HUMAN HEALTH EFFECTS	:	Not applicable
ENVIRONMENTAL EFFECTS	:	Not applicable
THE CLASSIFICATION	:	Not applicable

4. FIRST-AID MEASURES

INGESTION	:	Help to vomit as much as possible. If sick feeling continues,and ask a physician for advice.
INHALATION	:	When a gas generated from the molten polymer has been inhaled,remove fresh air without delay and wait until the victim is recovered. If sick feeling continues,ask a physician for advice.
SKIN CONTACT	:	Cool the contacted skin with clean water without delay,if a contact with the polymer In a molten form. Do not force to remove the solid resin on the skin. If any burns are observed on the skin,ask a physician for advice.
EYE CONTACT	:	Cool and rinse the eye with clean water for at least 15 minutes when the eyes had contact with molten polymer. In case of wearing contact lenses,remove the lenses as soon as possible,and ask a physician for advice. When the eye had contact with the polymer in an ordinary solid form,rinse the eye with clean water without delay. If the discomfort persists,ask a physician for advice.

5. FIRE-FIGHTING MEASURES

EXTINGUISHING MEDIA	:	Water,form fire-extinguishing agent,powder fire-extinguishing agent,and carbon dioxide gas.

SPECIFIC METHODS	:	Extinguish the fire with water. A method of extinguishing an ordinary fire may be applied. Do not apply water directly to processing machines.
SPECIFIC HAZARDS	:	Incomplete combustion leads to generation of toxic gases such as carbon monoxide or phenol,in addition to carbonic acid gas and water.
SPECIAL EQUIPMENT FOR THE PROTECTION OF FIREFIGHTERS	:	In case the fire gained force,use a gas mask or other protective equipment.

6. ACCIDENTAL LEAKAGE MEASURES

PERSONAL PRECAUTIONS	:	When pellets were spilled on the road or floor,wipe them off with a besom or cleaner not to cause slipping.
ENVIRONMENTAL PRECAUSION	:	Handle the spillage in accordance with provisions given in the ″Resin pellet spillage preventive manual″,in order to prevent intakes by marine animals and birds.

7. HANDLING AND STORAGE

HANDLING	:	For molding work,effective means for local exhaust are required to discharge gases generated by melt processing.
HANDLING 2	:	Avoid inhaling of gases generated in moulding work. Do not directly touch resin of high temperature.
HANDLING 3	:	Avoid retaining hot resin in the processing machines for many hours.
HANDLING 4	:	This resin in a pellet form will neither ignite nor explode at room temperatures.
HANDLING 5	:	This pellets spilled on the floor are likely to cause slipping. Remove such spillage at any times.
HANDLING 6	:	Glass fibers are not generally exposed in a single substance under normal processing and handling conditions as they are compounded in pellets. However,the following measures will be necessary to minimize the exposure to glass fibers or dusts containing glass fibers,when pellets or molded parts containing glass fibers are cut,ground or burnt,depending on environmental and operational conditions. ・Those who are sensitive in skin to glass fiber should wear suitable(protective) clothes to minimize the exposure of their skin. ・Wash working clothes apart from other laundry,so that the latter will not cause contamination with glass fibers. ・Provide the workshop with partitions to prevent diffusion of glass fiber dusts. ・Pay precautions not to rub face,neck or arms with hands. Wash hands and gargle after working without fall. ・Keep dust sources totally enclosed. ・Provide local air exhausters and implement periodical inspections and adjustments at least once a year. ・Reduce cutting and grinding processes to the possible minimum,and devise working procedures to minimize dust generation. ・Provide dust-preventive masks,protective glasses and gloves for personal hygiene. ・Determine the operational environment at indoor working places and confirm the effects of environmental improvement. Note) Glass fibers are,like road dusts,told to be least hazardous to human bodies,but proper measures are required to avoid useless inhaling.
STORAGE	:	Keep the substance away from any fire or heat sources for the sake of safe storage.
RECOMMENDED PACKAGING MATERIALS	:	No information.

8. EXPOSURE CONTROL / PERSONAL PROTECTION

CONTROL CONCENTRATION	:	None at present
PERMISSIBLE CONCENTRATION	:	OSHA PEL/1985 Max. permissible concentration of inactive powder 15mg/m³ – ditto – (Aspiration) 5 mg/m³ ACGIH TLV/1992 1993 Exposure limit of the powder TWA 10 mg/m³
RESPIRATORY PROTECTION	:	Wear a dust-proof mask.
EYE PROTECTION	:	Wear protective glases or goggles.
HAND PROTECTION	:	Wear heat-resisting gloves against burns, when handling molten polymer.

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE etc.	:	Pellet
BOILING POINT	:	Not applicable
VAPOUR PRESSURE	:	Not applicable
VOLATILITY	:	Not applicable
SUBLIMATION	:	None
MELTING POINT	:	335℃～345℃
DENSITY	:	1.67
SOLUBILITY	:	Insolube in water
IGNITION POINT	:	540℃ or higher
EXPLOSION PROPERTY	:	Not applicable
INFLAMMABILITY	:	None
REACTIVITY WITH WATER	:	None
OXIDIZABILITY	:	None
SELF-REACTIVITY	:	None

10. STABILITY AND REACTIVITY

STABILITY AND REACTIVITY	:	Stable for nomal storage or handling.

11. TOXICOLOGICAL INFORMATION

SKIN CORROSIVE OROPERTIES	:	No finding.
SENSITIZING & IRRITANT EFFECTS	:	Gas generated in drying or melting is irritating eyes and skins.
ACUTE TOXICITY(INCLUDING LD50)	:	No finding.
SUBACUTE TOXICITY	:	No finding.
CHRONIC TOXICITY	:	No finding.
CARCINOGENECITY	:	No finding.

MUTAGENECITY(Micro organisms,chromosomal aberration)	:	No finding.
REPRODUCTIVE TOXICITY	:	No finding.
TERATOGENICITY	:	No finding.
OTHERS(Including generation of hazardous gases by reaction with water,for example)	:	No finding in this report means that there will be no hazard in general,but no proving data available at the time of reporting.
OTHER CAUTIONS	:	With regard to dust,the maximum permissible concentration and limits are fixed by OSHA and ACGIH.
OTHER CAUTIONS 2	:	Information on hazards of glass fibers as filler. 〈Effects on Human Bodies〉 (1) Effects on skin Stimulation to the skin with glass fibers may be caused when glass fibers diameter is larger than 4.5～5 μ m. They give mechanical stimulation followed by itchiness to the skin, but further continuous exposure reportedly results in extinction of stimulation. It may sometimes leads to irritable dermatitis complicated with urticaria or eczema-like reaction. It is, however reported that such dermatitis is not so serious in general and does not last too long. Therefore, skin stimulation can be prevented by proper use of glass fibers. (2) Effects on Tumor Investigations made on glass fibers till today reveal that there is neither increase in mortality of glass fiber production workers due to lung cancer or mesothelioma nor such cases reported. 〈Animal Test Report〉 It is suggested that carcinogenecity of mineral fibers is dependent on their shapes rather than on their constituents. According to a report on experiments using 17 kinds of artificial mineral fibers in various sizes prepared by Dr.Stanton of National Cancer Institute, in USA, statistical studies on corelations between the diameter and length of fibers and the coincidence of mesothelioma have revealed that mineral fibers having a diameter smaller than 0.25 μ m and a length larger than 8 μ m are closely related to the coincidence of cancers. Since these experiments were performed by artificially dosing the subject animals with a large quantity of glass fibers and consequently they are quite different from the actual exposures to human bodies, it is told to be problematic to make a conclusion that mineral fibers are hazardous to human health, basing on the results obtained from these experiments. Upto the present time, there is no result obtainable to demonstrate a mechanism of glass fibers causing lung cancers in spite of experiment by long exposure to glass fibers with high concentration.

12. ECOLOGICAL INFORMATION

BIODEGRADABILITY	:	No finding.
BIOACCUMULATION	:	No finding.
FISH TOXICITY	:	No finding.

13. DISPOSAL CONSIDERATION

WASTE FROM RESIDUES	:	This is designated as waste plastics among industrial wastes by the Wastes Disposal Law. Disposal waste pellets through licensed wastes handlers or local autonomous bodies if they are handling wastes disposal.
WASTE FROM RESIDUES 2	:	When disposed by incineration,use the well controlled incinerators in accordance with the Wastes Disposal Law,Air Pollution Control Law and Water Pollution Prevention Law.

14. TRANSPORT CONSIDERATION

UN CLASSIFICATION NUMBER	:	Not applicable
OTHER CAUSIONS	:	Handle with care so as not to give damages to containers or not to be subjected to wetting.
OTHER CAUSIONS 2	:	Secure the containers firmly so as not to cause collapsing.

15. REGULATORY INFORMATION

WASTE DISPOSAL LAW	:	Waste plastics among industrial wastes.
INDUSTRIAL SAFETY AND HEALTH LAW	:	Many colored products contain carbon black(designated as cabinet order No.93 Annex 9 No.130), antimony and its compounds(No.38), chromium and its compounds(No.142), copper and its compounds(No.370), nickel and its compounds(No.418), cobalt and its compounds(No.172), titanium dioxide(No.191), iron oxide(No.192), mineral oil(No.168) and/or silica(No.312) more than the threshold to be declared.
ORDINANCE ON INDUSTRIAL SAFETY AND HEALTH ARTICLE 95-6	:	Many colored products may contain ″antimony and its compouds″, ″cobalt and its compounds″ and /or ″titanium dioxide″ in 2006 Ministry of Health, Labour and Welfare's notification No25(revised on November 20 2008) Article 1.

16. OTHER INFORMATION

HANDLING OF THE DETAILS GIVEN ABOVE	:	This MSDS is the English version translated from the Japanese MSDS which is prepared for domestic use. Details given above are based on references, information and data available at this moment, but no warranty can be made on exactness of these details. They are also prepared on the assumption that the product will be handled in a normal way. For special handling, adequate safety and environmental measures should be taken in respect to its applications. Our products are not specifically intended for implants for medical and dental applications, and therefore they are not recommended for such applications. ″No finding″ in this report means that there will be no hazard in general, but no proving data is available at the time of reporting.
WHERE TO CALL FOR FURTHER INFORMATION	:	Polyplastics Co.,Ltd. Quality Assurance Dept. Tel. No 03-6711-8605

LCP（液晶高分子）

VECTRA®

E471i

VF2201/BK210P

（高耐热，高流动 品级）

宝 理 塑 料

Polyplastics

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E471i 的一般物性

表 1-1 一般物性（ISO）

项目	单位	测试方法	高耐热，高流动 E471i 低翘曲性
颜色			VF2201/BK210P
ISO(JIS)材质表示		ISO11469 (JIS K6999)	>LCP-(GF+MD)35<
密度	g/cm^3	ISO 1183	1.67
吸水率（23℃、水中 24 小时）	%	ISO 62	0.03
拉伸强度	MPa	ASTM D638	140
拉伸率	%	ASTM D638	2.3
弯曲强度	MPa	ISO 178	195
弯曲模量	MPa	ISO 178	13,500
弯曲应变	%	ISO 178	2.5
简支梁冲击强度（有缺口）	kJ/m^2	ISO 179/1eA	20
负荷变形温度（1.8MPa）	℃	ISO 75-1,2	265
负荷变形温度（0.45MPa）	℃	ISO 75-1,2	285
绝缘破坏强度（1mmt）	kV/mm	IEC 60243-1	47
绝缘破坏强度（3mmt）	kV/mm	IEC 60243-1	25
体积电阻率	Ω·cm	IEC 60093	2×10^{16}
体积电阻率（我公司规格）	Ω·cm	-	-
介电常数（1kHz）		IEC 60250	4.3
介电常数（1MHz）		IEC 60250	3.8
介电损耗角正切（1kHz）		IEC 60250	0.02
介电损耗角正切（1MHz）		IEC 60250	0.03
耐导电径迹	V	IEC 60112	150
耐电弧性	s		176
成型收缩率（80×80×1mmt、流动方向、注射压力 60MPa）	%	-	0.06
成型收缩率（80×80×1mmt、垂直方向、注射压力 60MPa）	%	-	0.43
成型收缩率（80×80×1mmt、流动方向、注射压力 79MPa）	%	-	-

项目	单位	测试方法	高耐热，高流动 E471i 低翘曲性
成型收缩率（80×80×1mmt、垂直方向、注射压力 79MPa）	%	-	-
阻燃性		UL94	V-0
ＵＬ发行的黄卡			E106764
「出口贸易管理法令」的该当项目番号			附属表 1 第 16 项

以上数值为材料的代表性测试值、并非该规格材料的最低值。

Polyplastics

宝理塑料株式会社

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● *Affiliates*

Polyplastics Asia Pacific Sdn. Bhd.(Kuala Lumpur)
Polyplastics Asia Pacific Singapore Pte.Ltd.(Singapore)
Polyplastics Marketing (T) Ltd.(Bangkok)
宝理塑料（中国）有限公司（香港）
宝理工程塑料贸易（上海）有限公司
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台湾宝理塑胶股份有限公司（台北）
宝泰菱工程塑料（南通）有限公司（南通）

检测报告

编号：CANEC23015511806　　**日期：**2023 年 12 月 07 日　　

客户名称：　佛山市德祥源金属材料有限公司

客户地址：　佛山市禅城区祖庙街道佛山大道北 40 号二层自编 5-6 号（住所申报）

样品名称：　C5191

以上样品及信息由客户提供。

SGS 工作编号：　GZP23-020699

样品接收时间：　2023 年 12 月 01 日

检测周期：　2023 年 12 月 01 日 ~ 2023 年 12 月 07 日

检测要求：　根据客户要求检测

检测方法：　见后续页。

检测结果：　见后续页。

检测要求	结论
欧盟 RoHS 指令 2011/65/EU 附录 II 的修正指令(EU) 2015/863- 铅、汞、镉、六价铬、多溴联苯(PBBs)、多溴二苯醚(PBDEs)、邻苯二甲酸二丁酯 (DBP)、邻苯二甲酸丁苄酯(BBP)、邻苯二甲酸二(2-乙基已基)酯(DEHP)和邻苯二甲酸二异丁酯(DIBP)	符合

通标标准技术服务有限公司广州分公司

授权签名

李嘉欣

Jessie-JX Li 李嘉欣

批准签署人

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检测结果：

检测部件外观描述:

样品序号	样品编号	SGS 样品 ID	样品描述
SN1	A2	CAN23-0155118-0001.C002	铜色金属片

备注：

(1) 1 mg/kg = 1 ppm = 0.0001%
(2) MDL= 方法检测限
(3) ND = 未检出(< MDL)
(4) "-" = 未规定

欧盟 RoHS 指令 2011/65/EU 附录 II 的修正指令(EU) 2015/863- 铅、汞、镉、六价铬、多溴联苯(PBBs)、多溴二苯醚(PBDEs)、邻苯二甲酸二丁酯 (DBP)、邻苯二甲酸丁苄酯(BBP)、邻苯二甲酸二(2-乙基已基)酯(DEHP)和邻苯二甲酸二异丁酯(DIBP)

检测方法： 参考 IEC 62321-4:2013+AMD1:2017， IEC 62321-5:2013， IEC 62321-7-1:2015， IEC 62321-6:2015 和 IEC 62321-8:2017， 采用 ICP-OES，UV-Vis 和 GC-MS 进行分析。

检测项目	限值	单位	MDL	A2
镉 (Cd)	100	mg/kg	2	ND
铅 (Pb)	1000	mg/kg	2	36
汞 (Hg)	1000	mg/kg	2	ND
六价铬(Cr(VI))▼	-	μg/cm²	0.10	ND
多溴联苯之和(PBBs)	1000	mg/kg	-	ND
一溴联苯(MonoBB)	-	mg/kg	5	ND
二溴联苯(DiBB)	-	mg/kg	5	ND
三溴联苯(TriBB)	-	mg/kg	5	ND
四溴联苯(TetraBB)	-	mg/kg	5	ND
五溴联苯(PentaBB)	-	mg/kg	5	ND
六溴联苯(HexaBB)	-	mg/kg	5	ND
七溴联苯(HeptaBB)	-	mg/kg	5	ND
八溴联苯(OctaBB)	-	mg/kg	5	ND
九溴联苯(NonaBB)	-	mg/kg	5	ND
十溴联苯(DecaBB)	-	mg/kg	5	ND
多溴二苯醚之和(PBDEs)	1000	mg/kg	-	ND
一溴二苯醚(MonoBDE)	-	mg/kg	5	ND
二溴二苯醚(DiBDE)	-	mg/kg	5	ND
三溴二苯醚(TriBDE)	-	mg/kg	5	ND
四溴二苯醚(TetraBDE)	-	mg/kg	5	ND
五溴二苯醚(PentaBDE)	-	mg/kg	5	ND
六溴二苯醚(HexaBDE)	-	mg/kg	5	ND
七溴二苯醚(HeptaBDE)	-	mg/kg	5	ND
八溴二苯醚(OctaBDE)	-	mg/kg	5	ND

检验检测专用章 Inspection & Testing Services
SGS-CSTC Standards Technical Services Co., Ltd. Guangzhou Branch Technical Services Technical Laboratory

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检测项目	限值	单位	MDL	A2
九溴二苯醚(NonaBDE)	-	mg/kg	5	ND
十溴二苯醚(DecaBDE)	-	mg/kg	5	ND
邻苯二甲酸二丁酯 (DBP)	1000	mg/kg	50	ND
邻苯二甲酸丁苄酯 (BBP)	1000	mg/kg	50	ND
邻苯二甲酸二(2-乙基己基)酯 (DEHP)	1000	mg/kg	50	ND
邻苯二甲酸二异丁酯 (DIBP)	1000	mg/kg	50	ND

备注：

(1) 最大允许极限值引用自RoHS指令(EU) 2015/863。
(2) IEC 62321系列等同于 EN 62321系列。
(3) ▼ = a. 当六价铬的浓度高于0.13 μg/cm²时，样品为阳性，即含有六价铬；
b. 当六价铬的浓度为ND (低于0.10 μg/cm²) 时，样品为阴性，即未检测到六价铬；
c. 当六价铬的浓度介于0.10 μg/cm²与0.13 μg/cm²之间时，无法直接判定是否检测到六价铬，因不同个体的样品表面差异可能会影响测定结果。

由于未获知样品的存储条件和生产日期，样品的六价铬检测结果仅能代表测试时样品含六价铬的状态。

除非另有说明，参照 ILAC-G8:09/2019，使用简单接受（*w*=0）的二元判定规则进行符合性判定。
除非另有说明，此报告结果仅对检测的样品负责。本报告未经本公司书面许可，不可部分复制。
检测报告仅用于客户科研、教学、内部质量控制、产品研发等目的，仅供内部参考。

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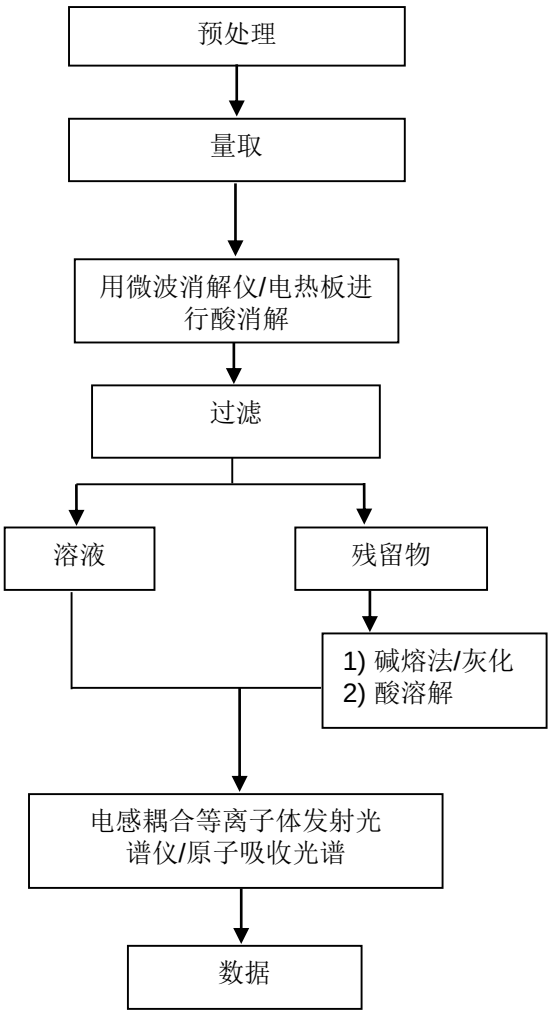
附件

元素检测流程图

样品按照下述流程被完全消解



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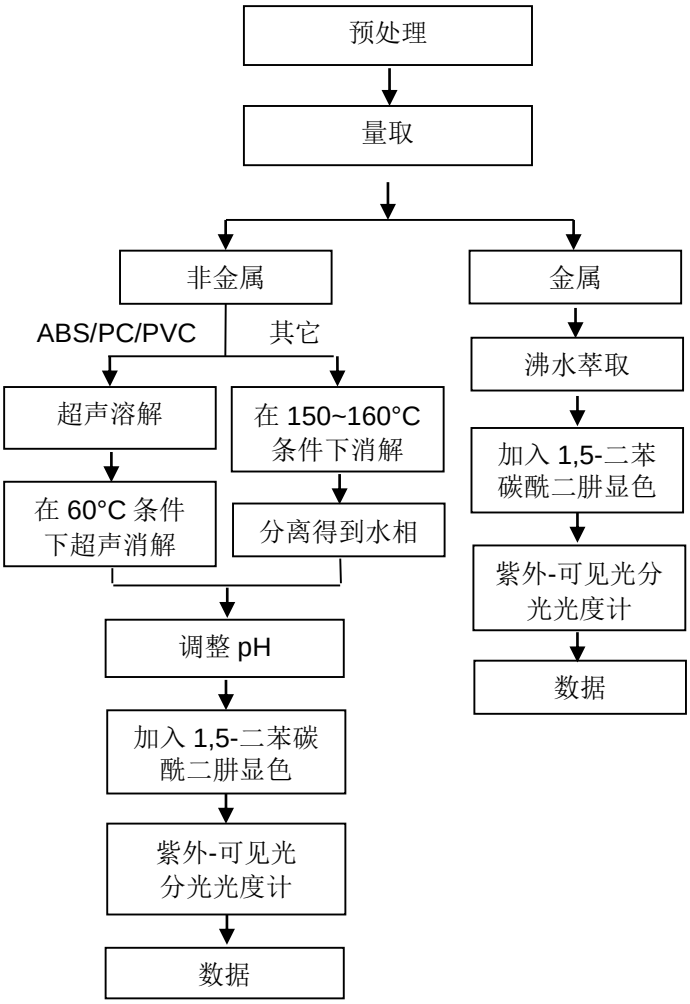
附件

六价铬检测流程图



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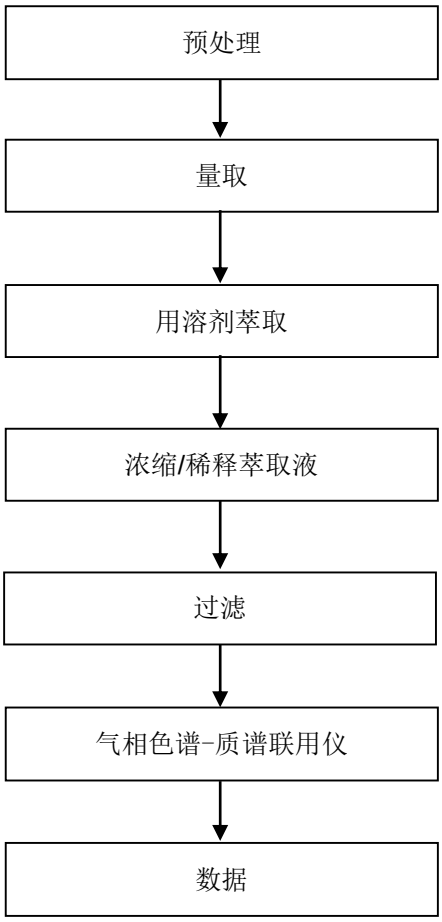
附件

PBBs/PBDEs 检测流程图



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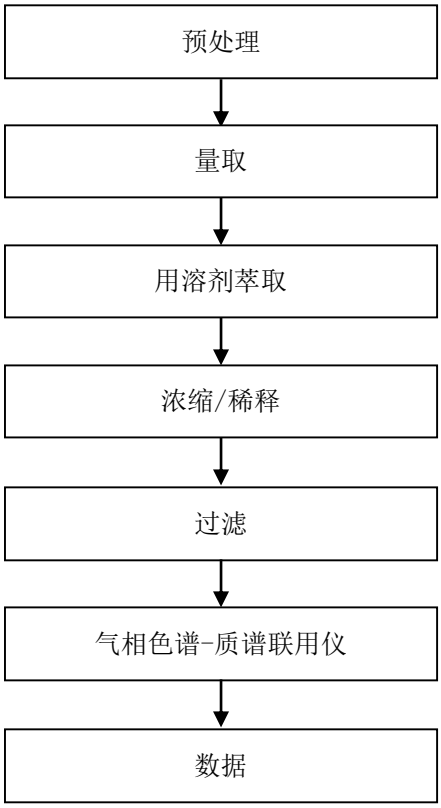
附件

Phthalates 检测流程图



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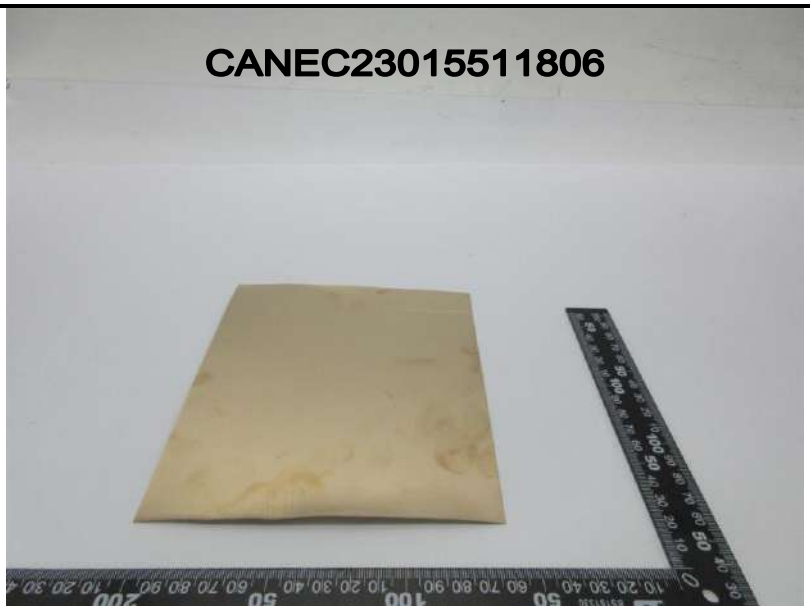
样品照片：



CAN23-0155118-0001.C002

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物質安全資料表

一、物品與廠商資料

物品名稱：磷铜带材 C5191
物品編號：
供應商名稱、地址及電話：佛山市德祥源金属材料有限公司　佛山市禅城区原大桥收费站东侧 20号一、二楼　0757-81820190
緊急聯絡電話/傳真電話：　TEL：0757-81820190/81820191

二、成分辨識資料

純物質：

中英文名稱：铜(Copper)
同義名稱：
化學文摘社登記號碼(CAS No.)：　7440-50-8
危害物質成分(成分百分比)：

成分表：

物質名稱	含量	Cas No.	EINECS No. EINECS 登陆号
锡	5.5-7．0%	7440-31-5	231-141-8
磷	0．03-0．35%	7723-14-0	231-768-7
铜	余量	7440-50-8	231-159-6

三、危害辨識資料

最重要危害效應	健康危害效應：　眼睛、皮肤、吸入、食入在正常使用下安全。如接触或吸入机械加工过程（如：打磨、切割等）中产生的粉末，可能引起眼睛、皮肤和呼吸系统刺激。
	環境影響：无
	物理性及化學性危害：
	特殊危害：

主要症狀：
物品危害分類：

四、急救措施

不同暴露途徑之急救方法： · 吸入： 立即移至通风良好处。如果呼吸停止，给与人工呼吸。如果呼吸困难，给与氧气。如果出现咳嗽和其他症状，就医。 · 皮膚接觸：立即用大量的水冲洗 15 分钟。如果症状未见好转，就医。 · 眼睛接觸：立即用大量的冲洗 15 分钟，时常提起眼睑。就医。 · 食入：如果患者有意识，催吐。如果患者无意识，切勿给入，就医。
最重要症狀及危害效應：
對急救人員之防護：
對醫師之提示：

五、滅火措施

適用滅火劑：水雾、化学干粉、二氧化碳、化学泡沫。
滅火時可能遭遇之特殊危害：
特殊滅火程序：
消防人員之特殊防護設備： 任何火灾中，消防人员请穿着自我给氧装置的全式消防服。

六、洩漏處理方法

個人應注意事項：
環境注意事項：避免产生粉尘，提供通风。避免化学物质进入环境中。
清理方法：拾起/扫起该物质并置于合适的容器中。

七、安全處置與儲存方法

處置：使用时，适当通风。减少粉尘产生和堆积。切勿接触眼睛、皮肤或衣物。避免食入和吸入
儲存： 储存于凉爽干燥处。储存于密闭容器中。

八、暴露預防措施

工程控制：储存和使用该物质的场所需配备洗眼设备和安全淋浴。适当通风。
控制參數：
· 生物指標：
個人防護設備： · 呼吸防護：如果发生过敏或者其他症状，使用合适的呼吸器或面罩。 · 手部防護：戴上合适的手套。 · 眼睛防護： 正常使用下无特殊要求 · 皮膚及身體防護：正常使用下无特殊要求。
衛生措施：

九、物理及化學性質

物質狀態： 固体	形狀：
顏色：黄色	氣味：无
pH 值：不适用	沸點/沸點範圍：无可用数据
分解溫度：	閃火點：不适用 測試方法：
自燃溫度：	爆炸界限：
蒸氣壓： 不适用	蒸氣密度：不适用
密度：8.8g/cm3	溶解度：996℃

十、安定性及反應性

安定性：正常条件下稳定
特殊狀況下可能之危害反應：

應避免之狀況：高温
應避免之物質：强氧化剂,酸,碱
危害分解物：

十一、毒性資料

急毒性：未被列入 NPT,IARC,或 OSHS 致癌物质
局部效應：
致敏感性：
慢毒性或長期毒性：
特殊效應：

十二、生態資料

可能之環境影響/環境流佈：无

十三、廢棄處置方法

廢棄處置方法： 废弃时,必须确定该物质是否属于危险废弃物质.处置前应参阅国家和地方有关法规,以确保正确的废弃物归类.

十四、運送資料

國際運送規定：该产品未被列为《国际般协危险品规则》;《国际海运危险货物规则》中的危险物质.
聯合國編號：无
國內運送規定：
特殊運送方法及注意事項：

十五、法規資料

適用法規：	USA(TSCA):	listed 列入
	Canada(DSL)	listed 列入
	EINECS/ELINCS	listed 列入

十六、其他資料

參考文獻		
製表單位	名稱：佛山市德祥源金属材料有限公司	
	地址/電話：佛山市禅城区原大桥原收费站东侧 20 号一、二楼　0757-81820190	
製 表 人	職稱：	姓名(簽章)：　苏绰敏
製表日期	2019-9-30	

Test Report

No.: CANEC24017095605 **Date:** Aug 09, 2024

Client Name: SHEN ZHEN SAN LONG TECHNOLOGY CO.LTD

Client Address: NO.1 JIANGBIAN INDUSTRIAL 3RD ROAD, SONGGANG STREET, BAO'AN DISTRICT, SHENZHEN

Sample Name: Gold Plating products

The above sample(s) and information were provided by the client.

SGS Job No.: TIC1020240801093538VSBA

Sample Receiving Date: Aug 05, 2024

Testing Period: Aug 05, 2024 ~ Aug 09, 2024

Test Requested: Select test(s) as requested by the client.

Test Method(s): Please refer to next page(s).

Test Result(s): Please refer to next page(s).

Test Requirement	Conclusion
EU RoHS Directive (EU) 2015/863 amending Annex II to Directive 2011/65/EU - Lead, Mercury, Cadmium, Hexavalent chromium, Polybrominated biphenyls (PBB), Polybrominated diphenyl ethers (PBDE), Bis(2-ethylhexyl) phthalate (DEHP), Butyl benzyl phthalate (BBP), Dibutyl phthalate (DBP) and Diisobutyl phthalate (DIBP)	Pass

Signed for and on behalf of
SGS-CSTC Standards Technical Services Co., Ltd. Guangzhou Branch

Dongyu Xie
Approved Signatory

scan to see the report
1D916959

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Test Result(s):

Test Part Description：

SN ID	Sample No.	SGS Sample ID	Description
SN1	A3	CAN24-0170956-0001.C003	Golden plated metal

Remarks:

(1) 1 mg/kg = 1 ppm = 0.0001%
(2) MDL = Method Detection Limit
(3) ND = Not Detected (< MDL)
(4) "-" = Not Regulated

EU RoHS Directive (EU) 2015/863 amending Annex II to Directive 2011/65/EU - Lead, Mercury, Cadmium, Hexavalent chromium, Polybrominated biphenyls (PBB), Polybrominated diphenyl ethers (PBDE), Bis(2-ethylhexyl) phthalate (DEHP), Butyl benzyl phthalate (BBP), Dibutyl phthalate (DBP) and Diisobutyl phthalate (DIBP)

Test Method: With reference to IEC 62321-4:2013+AMD1:2017, IEC 62321-5:2013, IEC 62321-7-1:2015 and IEC 62321-12:2023, analysis was performed by ICP-OES/AAS, UV-Vis and GC-MS.

Test Item(s)	Limit	Unit(s)	MDL	A3
Lead (Pb)	1000	mg/kg	2	11
Mercury (Hg)	1000	mg/kg	2	ND
Cadmium (Cd)	100	mg/kg	2	ND
Hexavalent Chromium (Cr(VI))▼	-	µg/cm²	0.10	ND
Polybrominated biphenyls (PBB)	1000	mg/kg	-	ND
Monobrominated biphenyl (MonoBB)	-	mg/kg	25	ND
Dibrominated biphenyl (DiBB)	-	mg/kg	25	ND
Tribrominated biphenyl (TriBB)	-	mg/kg	25	ND
Tetrabrominated biphenyl (TetraBB)	-	mg/kg	25	ND
Pentabrominated biphenyl (PentaBB)	-	mg/kg	25	ND
Hexabrominated biphenyl (HexaBB)	-	mg/kg	25	ND
Heptabrominated biphenyl (HeptaBB)	-	mg/kg	25	ND
Octabrominated biphenyl (OctaBB)	-	mg/kg	25	ND
Nonabrominated biphenyl (NonaBB)	-	mg/kg	25	ND
Decabrominated biphenyl (DecaBB)	-	mg/kg	25	ND
Polybrominated diphenyl ethers (PBDE)	1000	mg/kg	-	ND
Monobrominated diphenyl ether (MonoBDE)	-	mg/kg	25	ND
Dibrominated diphenyl ether (DiBDE)	-	mg/kg	25	ND
Tribrominated diphenyl ether (TriBDE)	-	mg/kg	25	ND
Tetrabrominated diphenyl ether (TetraBDE)	-	mg/kg	25	ND
Pentabrominated diphenyl ether (PentaBDE)	-	mg/kg	25	ND
Hexabrominated diphenyl ether (HexaBDE)	-	mg/kg	25	ND
Heptabrominated diphenyl ether (HeptaBDE)	-	mg/kg	25	ND
Octabrominated diphenyl ether (OctaBDE)	-	mg/kg	25	ND

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Test Item(s)	Limit	Unit(s)	MDL	A3
Nonabrominated diphenyl ether (NonaBDE)	-	mg/kg	25	ND
Decabrominated diphenyl ether (DecaBDE)	-	mg/kg	25	ND
Di-2-Ethyl Hexyl Phthalate (DEHP)	1000	mg/kg	50	ND
Benzyl Butyl Phthalate (BBP)	1000	mg/kg	50	ND
Dibutyl Phthalate (DBP)	1000	mg/kg	50	ND
Diisobutyl Phthalate (DIBP)	1000	mg/kg	50	ND

Notes:

(1) The maximum permissible limit is quoted from RoHS Directive (EU) 2015/863.

(2) IEC 62321 series is equivalent to EN 62321 series.

(3) ▼ =
a. The sample is positive for Cr(VI) if the Cr(VI)concentration is greater than 0.13 μg/cm^2. The sample coating is considered to contain Cr(VI).
b. The sample is negative for Cr(VI) if Cr(VI) is ND (concentration less than 0.10 μg/cm^2). The coating is considered a non-Cr(VI) based coating.
c. The result between 0.10 μg/cm^2 and 0.13 μg/cm^2 is considered to be inconclusive-unavoidable coating variations may influence the determination.

Information on storage conditions and production date of the tested sample is unavailable and thus Cr(VI) results represent status of the sample at the time of testing.

Unless otherwise stated, the decision rule for conformity reporting is based on Binary Statement for Simple Acceptance Rule (*w*=0) stated in ILAC-G8:09/2019.

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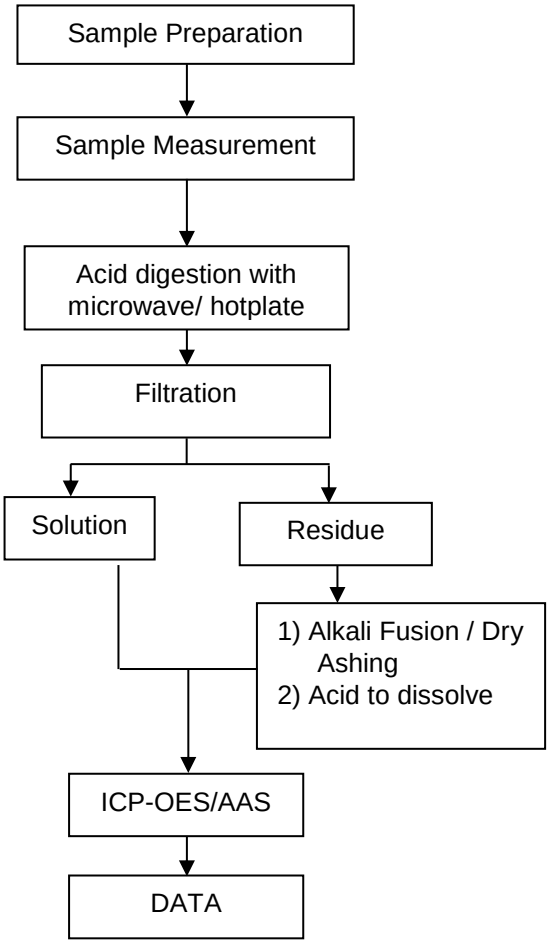
Elements Testing Flow Chart

These samples were dissolved totally by pre-conditioning method according to below flow chart.



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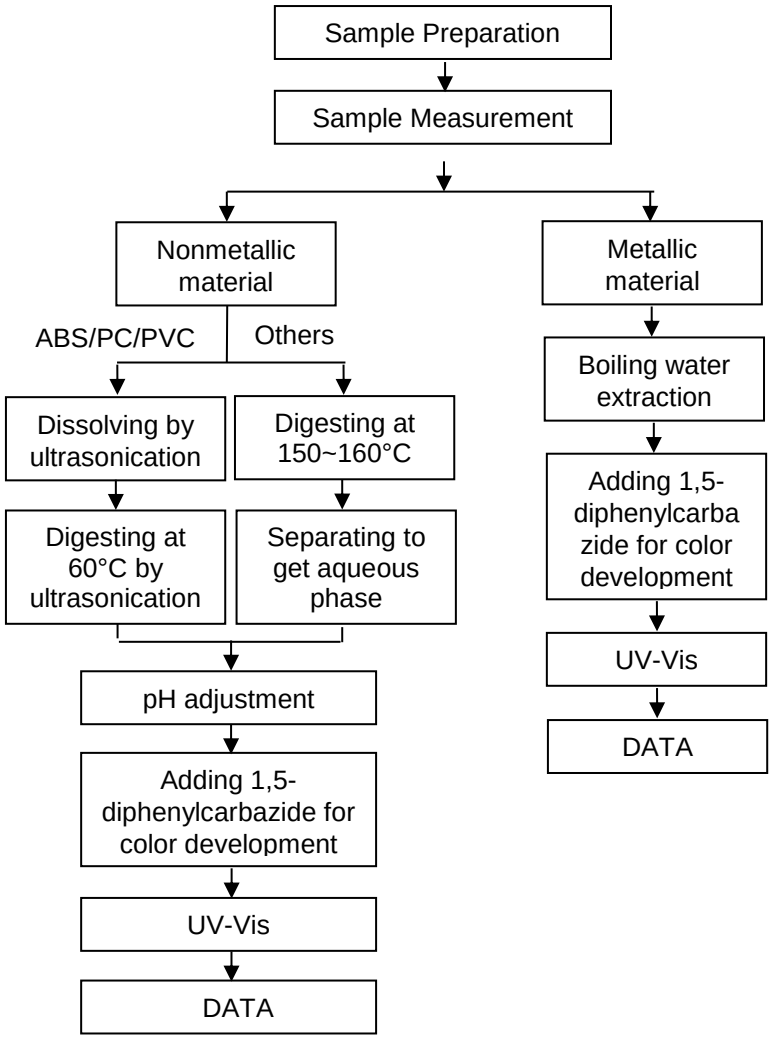
Hexavalent Chromium (Cr(VI)) Testing Flow Chart



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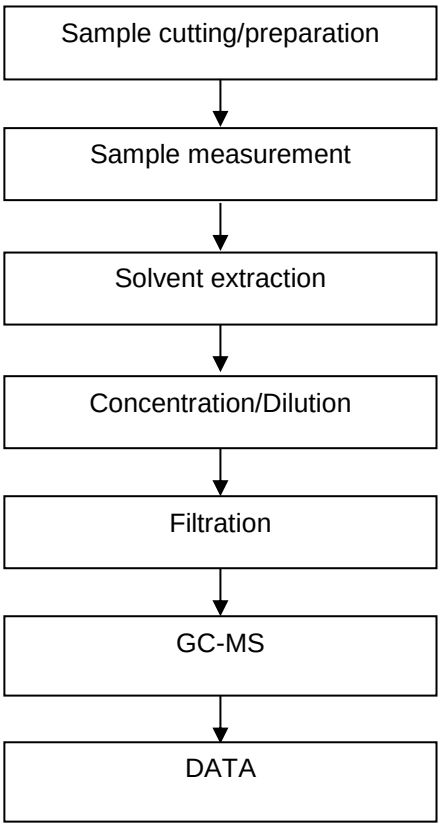
PBBs/PBDEs/Phthalates Testing Flow Chart



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Sample Photo:



CAN24-0170956-0001.C003

SGS authenticate the photo on original report only

*** End of Report ***

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SHEN ZHEN SAN LONG TECHNOLOGY CO.LTD

Material Safety Data Sheet

1、 Product and Company Identification

Name of product：	**Gold (Au / plating layer)**
CAS Number：	**7440 - 57- 5**
Manufacturer：	**Company Nane:SHEN ZHEN SAN LONG TECHNOLOGY CO.LTD** **Company Address: INDUSTRIAL ZONE JIANGBIAN SONGGANG S.T BAOAN DISTRICT SHEN ZHEN CHINA** **TEL：0755-27468119** **FOX：0755-27468123**

2、 Composition / information on ingredients

Material	Purity Impurities	Elements , ppm
Gold (Au)	**99.99% ≤ 100%**	**Ag:⩽15 , Fe:⩽10 , Cu:⩽5**

3、 Hazards information for man and environment

No identified effect on man and environment。

4、 First aid measures

General information ：
Product composition and nature is insusceptible to case of any inhalation and ingestion。

In case of skin contact ：
If anyone has allergy to gold，seek medical advice。

In case of eye contact ：
Avoid too much rolling of eye ball and immediately seek doctor for treatment。

Treatment ：
Seek medical advice for any symptoms。

5、 Fire fighting measures

Product does not burn but will only change form and melt down if directly expose to fire。

6、 Accidental release measures

No special measures。

7、 Handling and storage

Wear protective gloves to handle the product and Store in controlled environment to avoid any smudginess or oxidation。

8、 Exposure controls / personal protection

Personal Protective Equipment：

Skin： Wear appropriate gloves to prevent skin exposure。

The others，No declared special measures。

9、 Physical and chemical properties

Form	Color	Odor
solid layer	yellow gold	odorless

Boiling point ： 2807 deg centigrade

Melting point ： 1063 deg centigrade

Density ： 19.3（17.5）g / cm^3

Solvent solubility： **aqua regia, hot sulfuric acid, alkali cyanide solution**

10、 Stability and reactivity

Conditions to avoid：

No hazardous reactions known 。

Hazardous decomposition products：

None 。

11、 Toxicological information

No known precise information 。

12、 Ecological information

Ecological data are not available 。

13、 Disposal considerations

Recommendations for the product：

Not to be disposed， recyclable material 。

Recommendation for the packaging

No special requirements 。

14、 Transport information

Not regulated 。

15、 Regulatory information

Remarks for classification，Does not require a hazard warning label but proper handling precautions must be observed 。

16、 Other information

Disclaimer：

Prepared by SAN LONG company（SHEN ZHEN），from the best knowledge available；No responsibility is accepted that the information is sufficient or correct in all cases。

Release Dept. :	Administration dept.		
Editor :	Li jing fei		
Date:	2022-10-8	**Valid time：**	5 years
Rev. :	A		

Test Report

No.: CANEC24017095603 **Date:** Aug 09, 2024

Client Name: SHEN ZHEN SAN LONG TECHNOLOGY CO.LTD

Client Address: NO.1 JIANGBIAN INDUSTRIAL 3RD ROAD, SONGGANG STREET, BAO'AN DISTRICT, SHENZHEN

Sample Name: Nickel Plating products

The above sample(s) and information were provided by the client.

SGS Job No.: TIC1020240801093538VSBA

Sample Receiving Date: Aug 05, 2024

Testing Period: Aug 05, 2024 ~ Aug 09, 2024

Test Requested: Select test(s) as requested by the client.

Test Method(s): Please refer to next page(s).

Test Result(s): Please refer to next page(s).

Test Requirement	Conclusion
EU RoHS Directive (EU) 2015/863 amending Annex II to Directive 2011/65/EU - Lead, Mercury, Cadmium, Hexavalent chromium, Polybrominated biphenyls (PBB), Polybrominated diphenyl ethers (PBDE), Bis(2-ethylhexyl) phthalate (DEHP), Butyl benzyl phthalate (BBP), Dibutyl phthalate (DBP) and Diisobutyl phthalate (DIBP)	Pass

Signed for and on behalf of
SGS-CSTC Standards Technical Services Co., Ltd. Guangzhou Branch

Dongyu Xie
Approved Signatory

scan to see the report
D85BBFB9

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Test Result(s):

Test Part Description：

SN ID	Sample No.	SGS Sample ID	Description
SN1	A2	CAN24-0170956-0001.C002	Silver-gray plated metal

Remarks:

(1) 1 mg/kg = 1 ppm = 0.0001%
(2) MDL = Method Detection Limit
(3) ND = Not Detected (< MDL)
(4) "-" = Not Regulated

EU RoHS Directive (EU) 2015/863 amending Annex II to Directive 2011/65/EU - Lead, Mercury, Cadmium, Hexavalent chromium, Polybrominated biphenyls (PBB), Polybrominated diphenyl ethers (PBDE), Bis(2-ethylhexyl) phthalate (DEHP), Butyl benzyl phthalate (BBP), Dibutyl phthalate (DBP) and Diisobutyl phthalate (DIBP)

Test Method: With reference to IEC 62321-4:2013+AMD1:2017, IEC 62321-5:2013, IEC 62321-7-1:2015 and IEC 62321-12:2023, analysis was performed by ICP-OES/AAS, UV-Vis and GC-MS.

Test Item(s)	Limit	Unit(s)	MDL	A2
Lead (Pb)	1000	mg/kg	2	29
Mercury (Hg)	1000	mg/kg	2	ND
Cadmium (Cd)	100	mg/kg	2	ND
Hexavalent Chromium (Cr(VI))▼	-	µg/cm²	0.10	ND
Polybrominated biphenyls (PBB)	1000	mg/kg	-	ND
Monobrominated biphenyl (MonoBB)	-	mg/kg	25	ND
Dibrominated biphenyl (DiBB)	-	mg/kg	25	ND
Tribrominated biphenyl (TriBB)	-	mg/kg	25	ND
Tetrabrominated biphenyl (TetraBB)	-	mg/kg	25	ND
Pentabrominated biphenyl (PentaBB)	-	mg/kg	25	ND
Hexabrominated biphenyl (HexaBB)	-	mg/kg	25	ND
Heptabrominated biphenyl (HeptaBB)	-	mg/kg	25	ND
Octabrominated biphenyl (OctaBB)	-	mg/kg	25	ND
Nonabrominated biphenyl (NonaBB)	-	mg/kg	25	ND
Decabrominated biphenyl (DecaBB)	-	mg/kg	25	ND
Polybrominated diphenyl ethers (PBDE)	1000	mg/kg	-	ND
Monobrominated diphenyl ether (MonoBDE)	-	mg/kg	25	ND
Dibrominated diphenyl ether (DiBDE)	-	mg/kg	25	ND
Tribrominated diphenyl ether (TriBDE)	-	mg/kg	25	ND
Tetrabrominated diphenyl ether (TetraBDE)	-	mg/kg	25	ND
Pentabrominated diphenyl ether (PentaBDE)	-	mg/kg	25	ND
Hexabrominated diphenyl ether (HexaBDE)	-	mg/kg	25	ND
Heptabrominated diphenyl ether (HeptaBDE)	-	mg/kg	25	ND
Octabrominated diphenyl ether (OctaBDE)	-	mg/kg	25	ND

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Notes:

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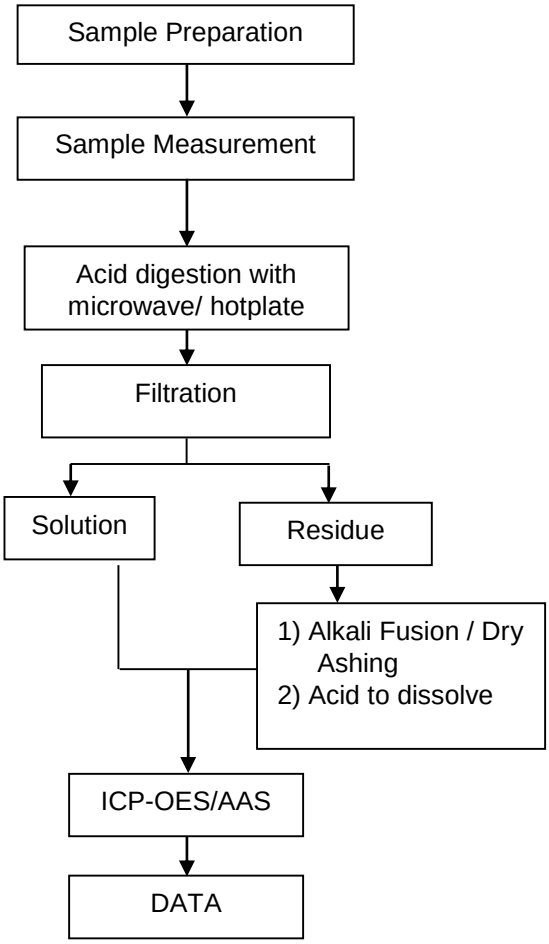

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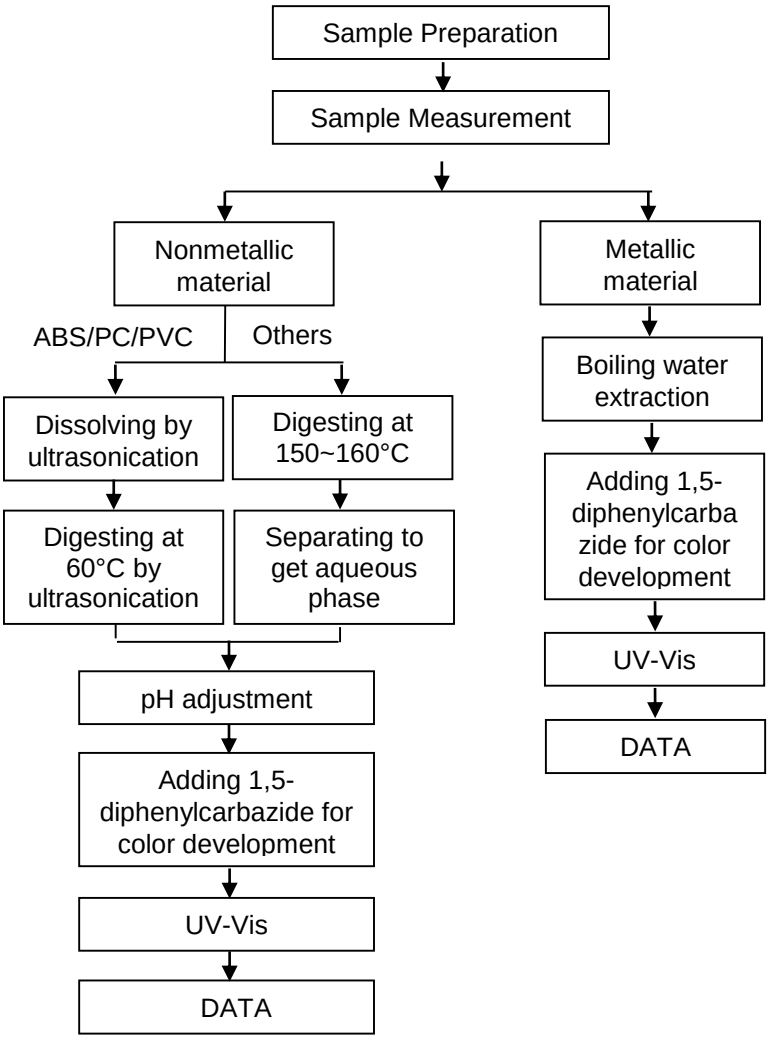

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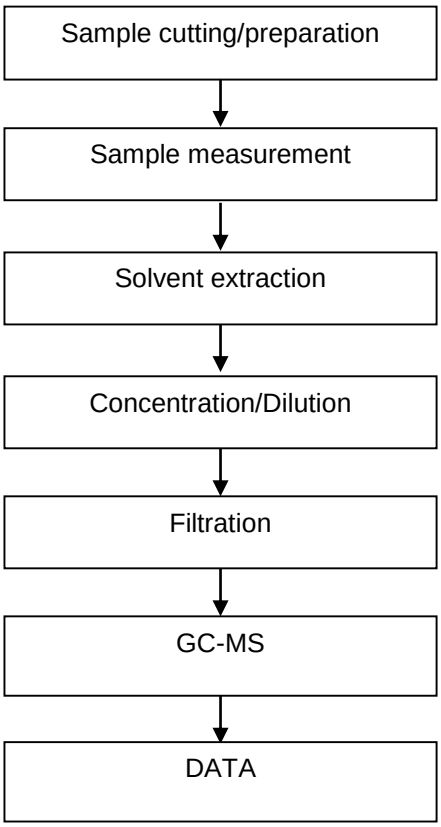

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Sample Photo:



CAN24-0170956-0001.C002

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Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN.Doccheck@sgs.com

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SHEN ZHEN SAN LONG TECHNOLOGY CO.LTD

Material Safety Data Sheet

1、 Product and Company Identification

Name of product：	**Nickel (Ni / plating layer)**
CAS Number：	**7440 - 02- 0**
Manufacturer：	**Company Nane:SHEN ZHEN SAN LONG TECHNOLOGY CO.LTD** **Company Address: INDUSTRIAL ZONE JIANGBIAN SONGGANG S.T BAOAN DISTRICT SHEN ZHEN CHINA** **TEL：0755-27468119** **FOX：0755-27468123**

2、 Composition / information on ingredients

Material	Purity Impurities	Elements , ppm
Nickel (Ni)	**99.80% ≤ 100%**	**Fe、 Ag 、Cu，etc**

3、 Hazards Identification

Emergency overview：

Limited evidence of a carcinogenic effect。 May cause sensitization by skin contact。

Potential Health Effects：

Eye: May cause eye irritation。

Skin: May cause skin sensitization， an allergic reaction，which becomes evident upon re-exposure to this material。 May cause severe irritation and possible burns。 May cause dermatitis.。

Ingestion: Causes gastrointestinal irritation with nausea，vomiting and diarrhea。

Inhalation: Inhalation of fumes may cause metal fume fever， which is characterized by flu-like symptoms with metallic taste，fever，chills，cough， weakness，chest pain，muscle pain and increased white blood cell count。 Inhalation of a mist of this material may cause respiratory tract irritation。 Breathing Nickel (Dust and Fume) can cause a sore or hole in the "bone" (septum) dividing the inner nose。

Chronic: Prolonged or repeated skin contact may cause sensitization dermatitis and possible destruction and/or ulceration。 May cause respiratory tract cancer。

4、 First aid measures

Eyes : Wash eyes with plenty of water for at least 15 minutes，occasionally lifting the upper and lower eyelids。 Get medical aid immediately。

Skin: Get medical aid if irritation develops or persists。 Wash clothing before reuse。 Wash skin with plenty of soap and water。

Ingestion: If victim is conscious and alert，give 2-4 cupfuls of milk or water。Never give anything by mouth to an unconscious person， Get medical aid immediately。

Inhalation: Remove from exposure and move to fresh air immediately。If not breathing， give artificial respiration。 If breathing is difficult， give oxygen。 Get medical aid if cough or other symptoms appear。

Antidote: There exists several chelation agents。The determination of there use should be made only by qualified medical personnel。

5、 Fire fighting measures

General Information: As in any fire，wear a self-contained breathing apparatus in pressure-demand， MSHA/NIOSH (approved or equivalent)， and full protective gear。 Dusts at sufficient concentrations can form explosive mixtures with air。 During a fire，irritating and highly toxic gases may be generated by thermal decomposition or combustion。
Dust can be an explosion hazard when exposed to heat or flame。

Extinguishing Media: Confining and smothering is preferable to applying water。
Do not use water、CO_2、or foam directly on fire itself。 Use dry sand， sodium chloride powder，graphite powder，copper powder or Lith-X powder。 Dousing metallic fires with water may generate hydrogen gas，an extremely dangerous explosion hazard， particularly if fire is in a confined environment。（Applicable to dust or vapour）

6、 Accidental release measures

General Information: Use proper personal protective equipment as indicated in Section 8。

Spills/Leaks: Very fine particles can cause a fire or explosion，Eliminate all ignition sources。Reduce airborne dust and prevent scattering by moistening with water。Sweep up， then place into a suitable container for disposal。 Carefully scoop up and place into appropriate disposal container。 （Applicable to dust or vapour）

7、 Handling and storage

Handling: Wash thoroughly after handling。Wear protective gloves to handle the product and Store in controlled environment to avoid any smudginess or oxidation。

8、 Exposure controls / personal protection

Personal Protective Equipment:

Skin： Wear appropriate gloves to prevent skin exposure。

The others，No declared special measures。

9、 Physical and chemical properties

Physical State: Solid **Color:** white to gray white

Odor: none reported **pH:** Not available。

Vapor Pressure: 1 mm Hg @ 1810 C **Viscosity:** Not applicable。

Boiling Point: 2730 deg C **Melting Point:** 1455 deg C

Autoignition Temperature: Not applicable。

Flash Point: Not applicable。

Decomposition Temperature: Not available。

Solubility in water: Insoluble in water。

Specific Gravity/Density: 8.90

Molecular Formula: Ni **Molecular Weight:** 58.69

10、 Stability and reactivity

Chemical Stability: Stable under normal temperatures and pressures。

Conditions to Avoid: Incompatible materials，dust generation。

Hazardous decomposition products： No hazardous reactions known 。

11、 Toxicological information

No known precise information 。

12、 Ecological information

Ecological data are not available 。

13、 Disposal considerations

Recommendations for the product： Products which are considered hazardous for supply are classified as Special Waste and the disposal of such chemicals is covered by regulations which may vary according to location. Contact a specialist disposal company or the local waste regulator for advice。

Recommendation for the packaging

No special requirements 。

14、 Transport information

Not regulated 。

15、 Regulatory information

The proper handling precautions must be observed 。

Other requirements must be accordance with local directive or statute 。

16、 Other information

Disclaimer：

Prepared bySAN LONG company（SHEN ZHEN），from the best knowledge available；
No responsibility is accepted that the information is sufficient or correct in all cases。

Release Dept. :	Administration dept.		
Editor :	Li jing fei		
Date:	2022-10-8	**Valid time：**	5 years
Rev. :	A		

检测报告
Test Report

报告编号 A2240165119104001O1E
Report No. A2240165119104001O1E

报告抬头公司名称 Company Name shown on Report	深圳市兴宏图电子材料有限公司/深圳市汇力邦电子材料有限公司 SHENZHEN XINGHONGTU ELECTRONIC MATERIALS CO., LTD/SHENZHEN HUILIBANG ELECTRONIC MATERIALS CO., LTD
地 址 Address	深圳市宝安区沙井街道壆岗社区立岗南路4号中亚硅谷B16-3 B16-3, CENTRAL ASIA SILICON VALLEY, NO. 4 LIGANG SOUTH ROAD, KUANGGANG COMMUNITY, SHAJING STREET, BAO'AN DISTRICT, SHENZHEN

以下测试之样品及样品信息由申请者提供并确认
The following sample(s) and sample information was/were submitted and identified by/on the behalf of the applicant

样品名称	高温胶
Sample Name	高温胶
样品型号	XHT-GWJ
Model No.	XHT-GWJ
样品颜色	黑色/金色/茶色
Color	黑色/金色/茶色
材料名称	PI
Material	PI
样品接收日期	2024.03.28
Sample Received Date	Mar. 28, 2024
样品检测日期	2024.03.28-2024.04.10
Testing Period	Mar. 28, 2024 to Apr. 10, 2024

检测要求
Test Requested

根据客户要求，对所提交样品中的铅(Pb)，镉(Cd)，汞(Hg)，六价铬(Cr(VI))，多溴联苯(PBBs)，多溴二苯醚(PBDEs)，邻苯二甲酸酯(DBP，BBP，DEHP，DIBP)，氟(F)，氯(Cl)，溴(Br)，碘(I)进行测试。

As specified by client, to test Lead (Pb), Cadmium (Cd), Mercury (Hg), Hexavalent Chromium (Cr(VI)), Polybrominated Biphenyls (PBBs), Polybrominated Diphenyl Ethers (PBDEs), Phthalates (DBP, BBP, DEHP, DIBP), Fluorine (F), Chlorine (Cl), Bromine (Br), Iodine (I) in the submitted sample(s).

检测依据/检测结果
Test Method/Test Result(s)

请参见下页。
Please refer to the following page(s).

批 准
Approved by

刘琳慧

授权签字人 Lab Authorized Signatory

日 期
Date

2024.04.10

No. R393382757

华测检测认证集团股份有限公司
Centre Testing International Group Co.,Ltd.
广东省深圳市宝安区新安街道兴东社区华测检测大楼
CTI Building, Xing Dong Community, Xin'an Sub-district, Bao'an District, Shenzhen City, Guangdong Province, P.R. China

检测报告
Test Report

检测依据 Test Method

测试项目 Test Item(s)	测试方法 Test Method	测试仪器 Measured Equipment(s)
铅 Lead (Pb)	IEC 62321-5:2013	ICP-OES
镉 Cadmium (Cd)	IEC 62321-5:2013	ICP-OES
汞 Mercury (Hg)	IEC 62321-4:2013+AMD1:2017 CSV	ICP-OES
六价铬 Hexavalent Chromium (Cr(VI))	IEC 62321-7-2:2017和/或IEC 62321-5:2013测试总铬含量 IEC 62321-7-2:2017 and/or determination of Total Chromium by IEC 62321-5:2013	UV-Vis/ICP-OES
多溴联苯 Polybrominated Biphenyls (PBBs)	IEC 62321-6:2015	GC-MS
多溴二苯醚 Polybrominated Diphenyl Ethers (PBDEs)	IEC 62321-6:2015	GC-MS
邻苯二甲酸酯 Phthalates (DBP, BBP, DEHP, DIBP)	IEC 62321-8:2017	GC-MS
氟 Fluorine (F)	参考EN 14582:2016 Refer to EN 14582:2016	IC
氯 Chlorine (Cl)	参考EN 14582:2016 Refer to EN 14582:2016	IC
溴 Bromine (Br)	参考EN 14582:2016 Refer to EN 14582:2016	IC
碘 Iodine (I)	参考EN 14582:2016 Refer to EN 14582:2016	IC

检测报告
Test Report

检测结果 Test Result(s)

测试项目 Tested Item(s)	结果 Result	方法检出限 MDL
	001	
铅 Lead (Pb)	N.D.	2 mg/kg
镉 Cadmium (Cd)	N.D.	2 mg/kg
汞 Mercury (Hg)	N.D.	2 mg/kg
六价铬 Hexavalent Chromium (Cr(VI))	N.D.	8 mg/kg

测试项目 Tested Item(s)	结果 Result	方法检出限 MDL
	001	
多溴联苯 Polybrominated Biphenyls (PBBs)		
一溴联苯 Monobromobiphenyl	N.D.	5 mg/kg
二溴联苯 Dibromobiphenyl	N.D.	5 mg/kg
三溴联苯 Tribromobiphenyl	N.D.	5 mg/kg
四溴联苯 Tetrabromobiphenyl	N.D.	5 mg/kg
五溴联苯 Pentabromobiphenyl	N.D.	5 mg/kg
六溴联苯 Hexabromobiphenyl	N.D.	5 mg/kg
七溴联苯 Heptabromobiphenyl	N.D.	5 mg/kg
八溴联苯 Octabromobiphenyl	N.D.	5 mg/kg
九溴联苯 Nonabromobiphenyl	N.D.	5 mg/kg
十溴联苯 Decabromobiphenyl	N.D.	5 mg/kg

测试项目 Tested Item(s)	结果 Result	方法检出限 MDL
	001	
多溴二苯醚 Polybrominated Diphenyl Ethers (PBDEs)		
一溴二苯醚 Monobromodiphenyl ether	N.D.	5 mg/kg
二溴二苯醚 Dibromodiphenyl ether	N.D.	5 mg/kg
三溴二苯醚 Tribromodiphenyl ether	N.D.	5 mg/kg
四溴二苯醚 Tetrabromodiphenyl ether	N.D.	5 mg/kg
五溴二苯醚 Pentabromodiphenyl ether	N.D.	5 mg/kg
六溴二苯醚 Hexabromodiphenyl ether	N.D.	5 mg/kg
七溴二苯醚 Heptabromodiphenyl ether	N.D.	5 mg/kg
八溴二苯醚 Octabromodiphenyl ether	N.D.	5 mg/kg
九溴二苯醚 Nonabromodiphenyl ether	N.D.	5 mg/kg
十溴二苯醚 Decabromodiphenyl ether	N.D.	5 mg/kg

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检测结果 Test Result(s)

测试项目 Tested Item(s)	结果 Result	方法检出限 MDL
	001	
邻苯二甲酸酯 Phthalates (DBP, BBP, DEHP, DIBP)		
邻苯二甲酸二丁酯 Dibutyl phthalate (DBP) CAS#:84-74-2	N.D.	50 mg/kg
邻苯二甲酸丁基苄基酯 Butyl benzyl phthalate (BBP) CAS#:85-68-7	N.D.	50 mg/kg
邻苯二甲酸二(2-乙基)己酯 Di-(2-ethylhexyl) phthalate (DEHP) CAS#:117-81-7	N.D.	50 mg/kg
邻苯二甲酸二异丁酯 Diisobutyl phthalate (DIBP) CAS#:84-69-5	N.D.	50 mg/kg

测试项目 Tested Item(s)	结果 Result	方法检出限 MDL
	001	
氟 Fluorine (F)	N.D.	10 mg/kg
氯 Chlorine (Cl)	N.D.	10 mg/kg
溴 Bromine (Br)	N.D.	10 mg/kg
碘 Iodine (I)	N.D.	10 mg/kg

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样品/部位描述Sample/Part Description

序号 No.	CTI样品ID CTI Sample ID	描述 Description
1	001	混测，黑色和茶色胶带 Mixed test, black and tawny adhesive tape

备注: **-对于检测铅，镉，汞之样品已消解完全。**
-根据客户要求，对样品进行混合测试，测试结果不代表混合测试样品中任何一种单一材质的含量。
-根据客户声明，本报告中的报告抬头公司名称与报告A2240165119104001E中的报告抬头公司名称为销售商与供应商的关系，本报告的测试结果引用自报告A2240165119104001E。
-N.D. = 未检出（小于方法检出限）
-mg/kg = ppm = 百万分之一

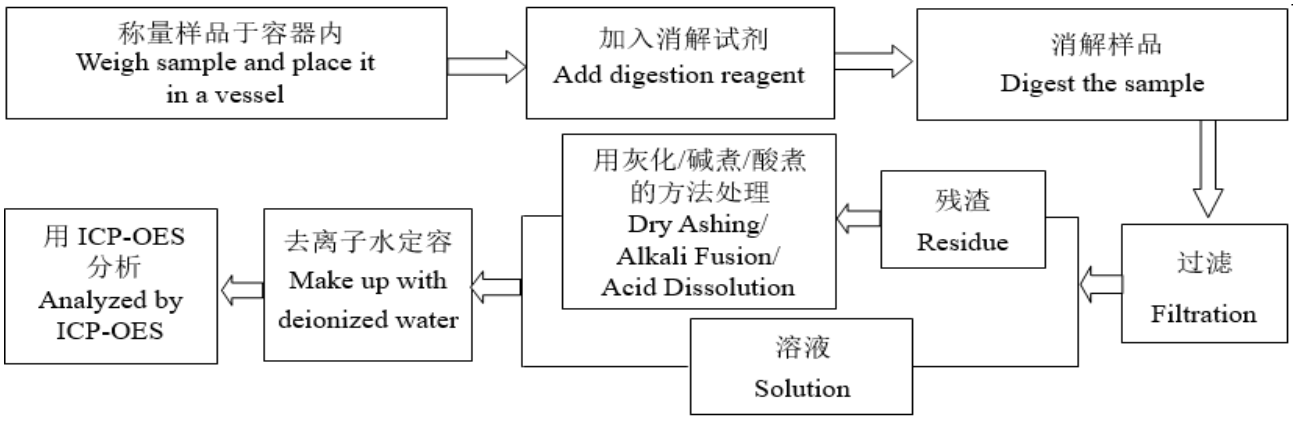
Remark: **-The sample(s) had been dissolved totally tested for Lead, Cadmium, Mercury.**
-As specified by client, the test was conducted by mixing several samples together. The result(s) shown on this report may be different from the content of any homogeneous material.
-According to the client's statement, the Company Name shown on Report in this report and the Company Name shown on Report in the report A2240165119104001E are the marketing-supply relations, the test result(s) of this report is/are presented in refrence to the result(s) that reported in A2240165119104001E.

-MDL = Method Detection Limit
-N.D. = Not Detected (<MDL)
-mg/kg = ppm = parts per million

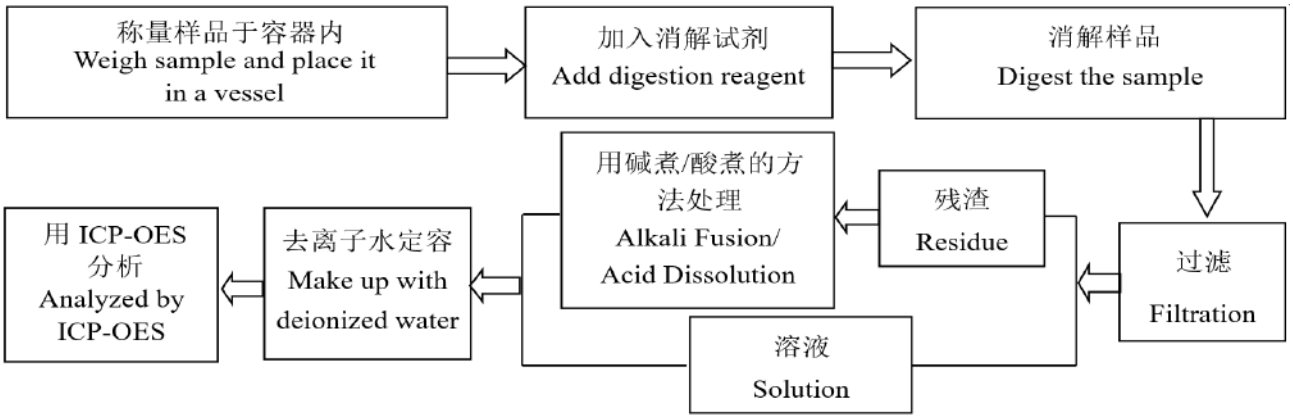
注释: **本报告中的数据结果供科研、教学、企业内部质量控制、企业产品研发等目的用。**
Note: **The testing data and result(s) in this report is(are) just for scientific research, education, internal quality control and product development etc.**

检测流程 Test Process

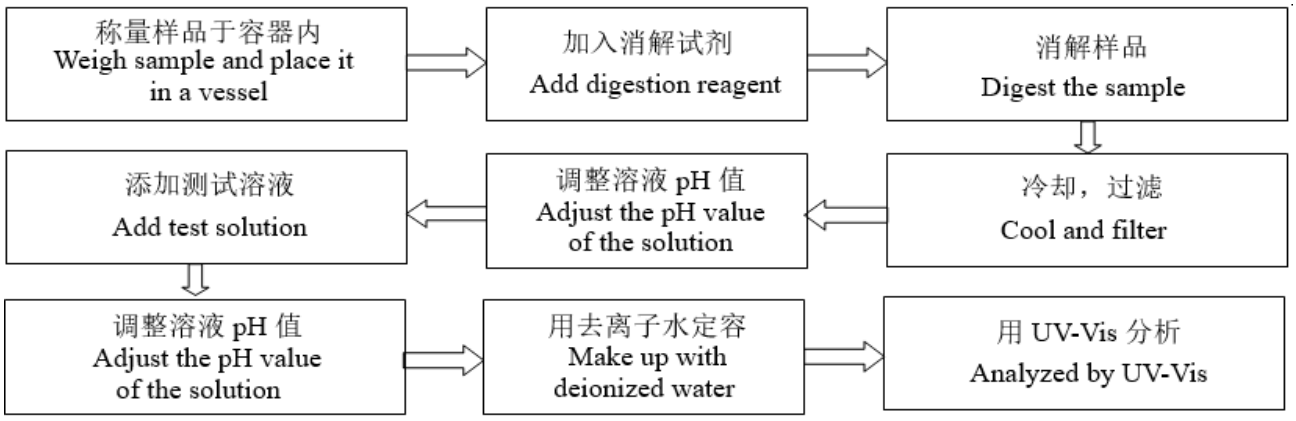
1. 铅(Pb)，镉(Cd)，铬(Cr)
   Lead (Pb), Cadmium (Cd), Chromium (Cr)



2. 汞(Hg)
   Mercury (Hg)



3. 六价铬(Cr(VI))
   Hexavalent Chromium (Cr(VI))



检测报告
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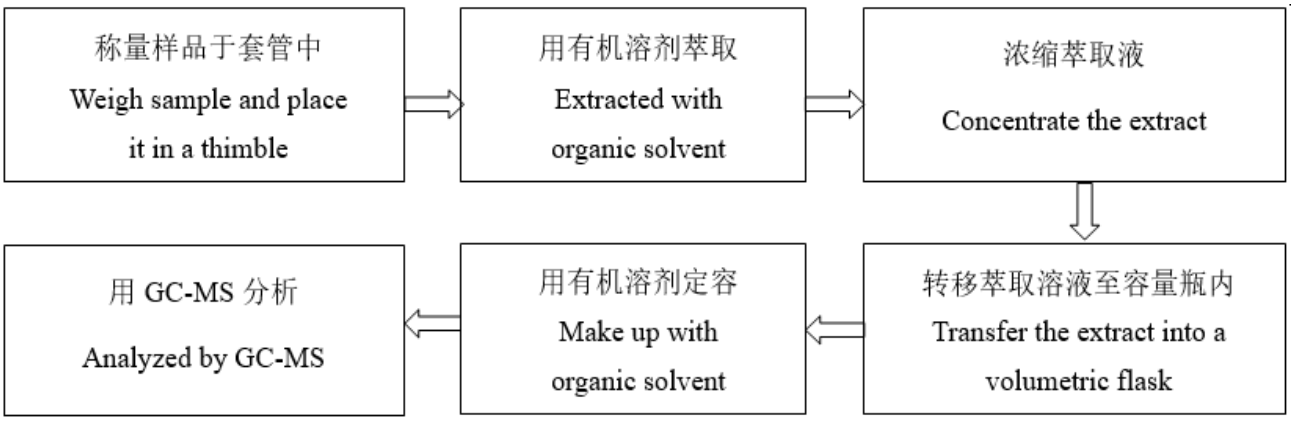
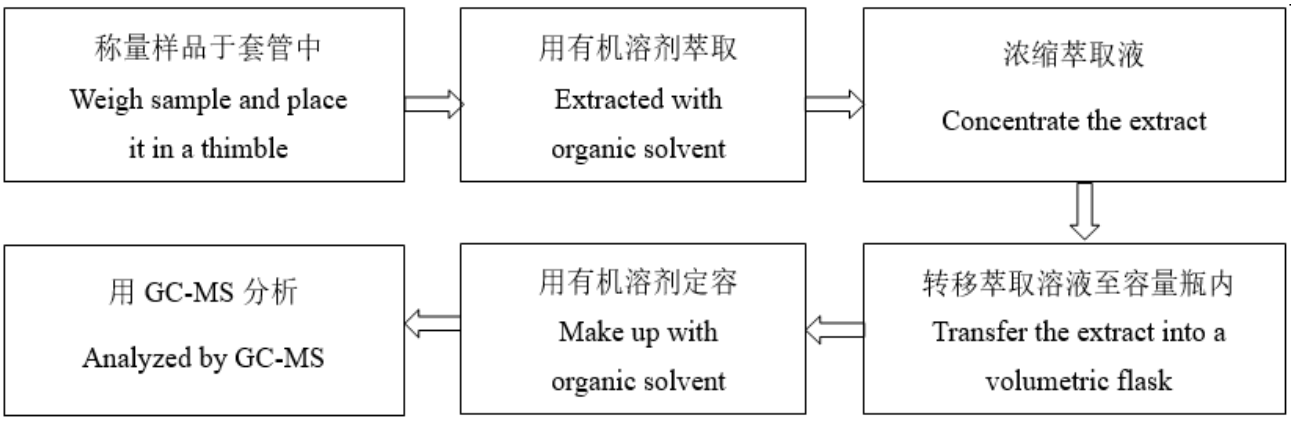
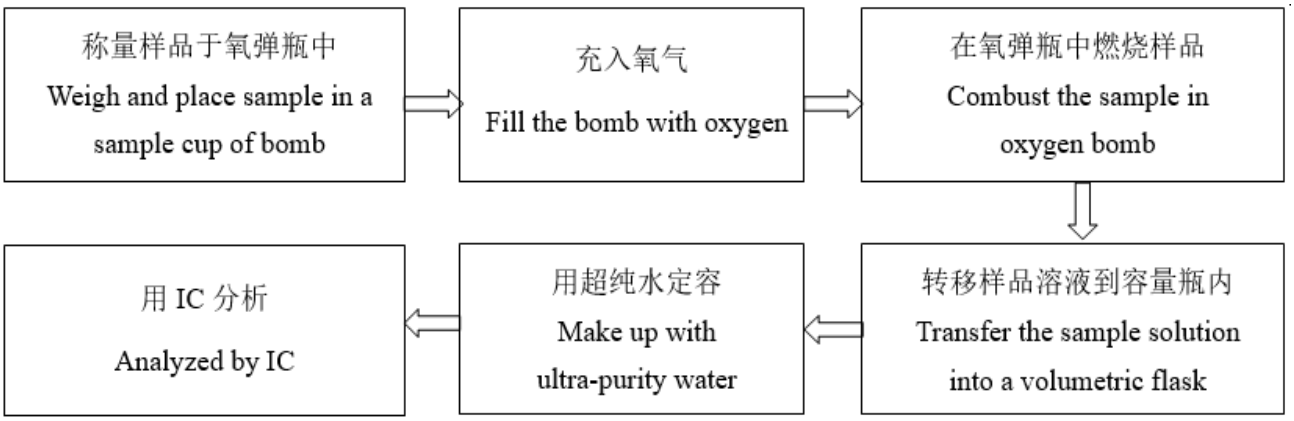
4. 多溴联苯(PBBs)， 多溴二苯醚(PBDEs)
Polybrominated Biphenyls (PBBs), Polybrominated Diphenyl Ethers (PBDEs)



5. 邻苯二甲酸酯(DBP, BBP, DEHP, DIBP)
Phthalates (DBP, BBP, DEHP, DIBP)



6. 氟(F)， 氯(Cl)， 溴(Br)， 碘(I)
Fluorine (F), Chlorine (Cl), Bromine (Br), Iodine (I)



检测报告
Test Report

样品图片
Photo(s) of the sample(s)



声明Statement：

1. 检测报告无批准人签字、“专用章”及报告骑缝章无效；
   This report is considered invalid without approved signature, special seal and the seal on the perforation;
2. 报告抬头公司名称及地址、样品及样品信息由申请者提供，申请者应对其真实性负责，CTI未核实其真实性；
   The Company Name shown on Report and Address, the sample(s) and sample information was/were provided by the applicant who should be responsible for the authenticity which CTI hasn’t verified;
3. 本报告检测结果仅对受测样品负责；
   The result(s) shown in this report refer(s) only to the sample(s) tested;
4. 除非另有说明，报告参照ILAC-G8:09/2019 / CNAS-GL015:2022使用简单接受(w=0)二元判定规则进行符合性判定;
   Unless otherwise stated, the decision rule for conformity reporting is based on Binary Statement for Simple Acceptance Rule (w=0) stated in ILAC-G8:09/2019 / CNAS-GL015:2022;
5. 未经CTI书面同意，不得部分复制本报告；
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6. 如检测报告中的英文内容与中文内容有差异，以中文为准。
   In case of any discrepancy between the English version and Chinese version of the testing reports (if generated), the Chinese version shall prevail.

报告结束
*** End of report ***

物质安全资料表（MSDS）

一、 物品与厂商资料：

物品名称：聚酰亚胺胶带
物品编号：D Y-G2550
制造厂商或供应商名称：深圳市兴宏图电子材料有限公司
制造厂商或供应商地址：深圳市宝安区沙井街道新桥第三工业区金元三路 25 号三楼
制造厂商或供应商电话：0775-27241987

二、 成分辨认资料：

中（英）文名称	同义名称	化学文摘社登号码（CAS NO.）	危害物质成份（百分比）
聚酰亚胺胶带(Polyimide Tape)	无	188-3-88	无

三、 危害辨认资料：

最重要危害效应	紧急概要
	健康危害效应： 无
	环境影响： 无
	特殊危害： 无
主要症状： 无	
危害物质分类： 无	

四、 急救措施

不同曝露途径之急救措施： 吸 入：不需要预先急救措施 皮肤接触：不需要预先急救措施 眼睛接触：立即用大量干净水冲洗，情况严重者去医院就医 食 入：去医院就医
最重要症状及急害效应：无
对急救人员之防护：无
对医师之提示：无

五、 灭火措施：

适用灭火剂：水、二氧化碳、干粉、泡沫等灭火剂
灭火砖可能遇过之特殊危害：无
特殊灭火程式：无
消防人员之特殊防护设备：无

六、 泄露处理方法：

个人应注意事项：无
环境注意事项：无
清理方法：无

七、 安全处置与储存方法：

处置： 无
储存： 防潮、防晒、防雨等

八、 曝露预防措施：

工程控制：
控制参数： 八小时日时量平均容许浓度/短时间时量平均容许浓度/最高容许浓度； 生物指标：
个人防护设备：不需要 呼吸防护：不需要 手部防护：不需要 眼睛防护：避免眼睛接触 皮肤及身体防护：不需要
卫生措施：　　无

九、 物理及化学资料：

物质状态：卷状胶带	形状：卷状胶带
颜色：琥珀色	气味：无
PH 值：不适用	沸点/沸点范围：不适用
分解温度：不适用	闪火点：　℃　　不适用 测试方法：　开杯　闭杯
自燃温度：不适用	爆炸界限：不适用
蒸气比重（空气=1）：不适用	蒸气密度：不适用
密度：不适用	溶解度：不适用

十、 安定性及反应性：

安定性：稳定	特殊状况下可 能之危害反应：不会发生危害反应
危害分解物：无	
应避免之状况：不清楚	
应避免之物质：酸、强氧化剂	

十一、毒性资料：

急毒性：-----
局部效应：-----
致敏感性：-----
慢毒性或长期毒性：-----
特殊效应：-----

十二、生态资料：

可能之环境影响/环境流布：无

十三、废气处理方法：

废气处置方法：法律许可的工厂废气处理

十四、运送资料：

国际运送规定：无
联合国编号：无
国内运送规定：无
特殊运送方法及注意事项：无

十五、法规资料：

适用法规：ISO14001

十六、其他资料：

参考文款：无			
制表单位	名称：深圳市兴宏图电子材料有限公司		
	地址：深圳市宝安区沙井街道新桥第三工业区金元三路 25 号三楼		
	电话：0755-27241987	传　　真	0755-81778190
制表人	职称：品管部经理	姓名（签章）	叶艺萍
制表日期	2017 年 3 月 19 日		

興竣豪科技(深圳)有限公司

產品貯存規範書

1. **目的**:

為使客戶能知悉我司所生產的成品的貯存條件,從而確保產品的品質發生變質,特製訂此規範書。

2. **範圍**:竣豪生產的所有成品。

3. **權責**:竣豪品管部主辦,相關部門協辦。

4. **內容重點**:

4.1 產品組件

4.1.1 五金類. (PIN針 端子)

4.1.2 塑膠件 (NY-6T. NY-9T. NY-46. NY-66. LCP. PBT. PPS. PC. ABS. HTN)

4.2貯存環境

4.2.1溫度控制在20℃-25℃之間.

4.2.2相對濕度控制在60%以下

4.2.3空气乾淨,無酸,鹼,鹽等腐蝕性介質離子

4.3防護措施

4.3.1 密封包裝確保鍍層表面無氧化及發黑發白現象.

4.3.2 在產品上線時.當日使用不完之產品需按原包裝方式包裝.且貯存環境參照4.2.餘料并建議10日內使用完畢.

4.4建議上線環境溫度.

4.4.1 因塑膠特性關系.吸收水份較快.所以貯存環境條件非常重要.

4.4.2 產品上線時請保持常溫25℃以下.時間控制在8小時以內.

在以上條件基礎上,產品自竣豪交貨日算起,貯存期為鍍金,鍍銀產品為半年,鍍錫產品(包裝袋內加放干燥劑)為三個月,在此貯存期限內若品質發生劣化.由竣豪負責處理.如未在此貯存條件下或超過貯存時間,產品發生變異,敬請客戶自行負責.如有不便,望諒解!

衷心感謝尊敬的客戶能予以配合!

核準: 審核: 制定: 張紅蘭

管理体系认证
注册证书

兹证明，以下组织：

兴竣豪科技（深圳）有限公司

中国广东省深圳市龙华区福城街道福民社区悦兴路63号鹏发第一工业园2号 201、301

的管理体系，符合以下标准要求并予以注册：

ISO 14001:2015

此管理体系适用于：

电子连接部件（排针、排座、板对线，板对板）的生产

统一社会信用代码：
91440300570005153X

证书编号：
121506003

首次认证日期：
2015年07月20日

认证决定日期：
2024年07月14日

签发日期：
2024年07月14日

有效期至：
2027年07月19日

Calin Moldovean
President, Business Assurance

Intertek Certification Limited, 10A Victory Park, Victory Road, Derby DE24 8ZF, United Kingdom

Intertek Certification Limited
是 UKAS 认可的认证机构，
注册号为 014

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CERTIFICATE OF REGISTRATION

This is to certify that the management system of:

Superior Tech (Shenzhen) Co., Ltd.

201、301, No. 2, Pengfa First Industrial Park, No. 63, Yuexing Road, Fumin Community, Fucheng, Longhua District, Shenzhen, Guangdong Province, P.R. China

has been registered by Intertek as conforming to the requirements of:

ISO 14001:2015

The management system is applicable to:

Manufacture of Electronic Connection Unit (Pin Headers, Female Headers, Wire to Board， Board to Board)

Unified Social Credit Identifier:
91440300570005153X

Certificate Number:
121506003

Initial Certification Date:
20 July 2015

Date of Certification Decision:
14 July 2024

Issuing Date:
14 July 2024

Valid Until:
19 July 2027

Calin Moldovean
President, Business Assurance

Intertek Certification Limited, 10A Victory Park, Victory Road, Derby DE24 8ZF, United Kingdom

Intertek Certification Limited is a UKAS accredited body under schedule of accreditation no. 014.

In the issuance of this certificate, Intertek assumes no liability to any party other than to the Client, and then only in accordance with the agreed upon Certification Agreement. This certificate's validity is subject to the organisation maintaining their system in accordance with Intertek's requirements for systems certification. Validity may be confirmed via email at certificate.validation@intertek.com or by scanning the code to the right with a smartphone. The certificate remains the property of Intertek, to whom it must be returned upon request.
The annual validity of the certificate can also be checked through the website http://www.cnca.gov.cn of CNCA in China.