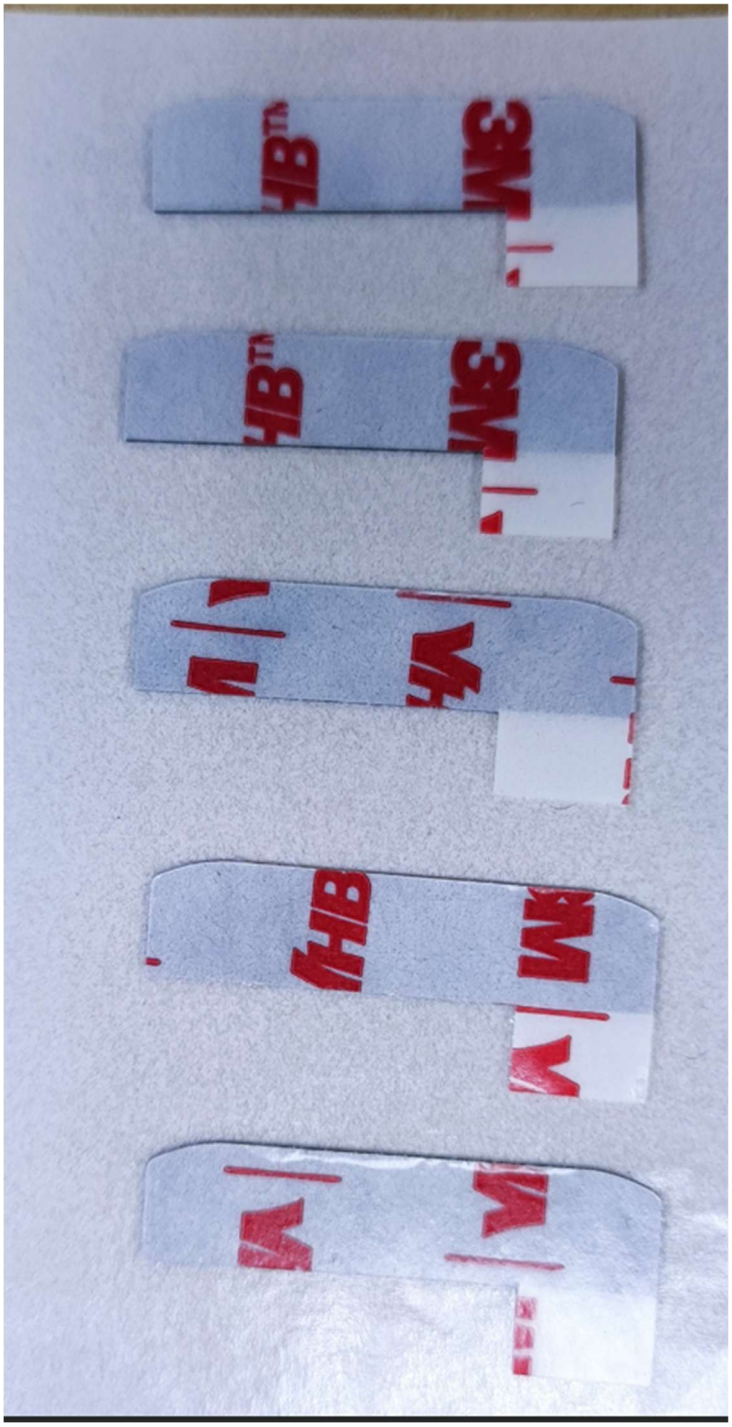


設計驗證
工程課
2025 -09- 24
發行
鈺緯科技開發股份有限公司

承　　認　　書

SPECIFICATION　FOR　APPROVAL

客戶:鈺緯科技開發股份有限公司

品名:3M 5915P 背 格拉信紙

規格:0.4T*29.5mm*7mm

料號:3MD695TH010(M3522)

設計驗證
工程課
2025 -09- 24
發行
鈺緯科技開發股份有限公司

主　管	審　查	製　作
游鈺衡	游鈺崧	王瀞融

俐　元　企　業　股　份　有　限　公　司

俐　誠　企　業　股　份　有　限　公　司

LI YUN　ENTERPRISE CO., LTD.

LI CHENG ENTERPRISE CO., LTD.

地　址：新　北　市　樹　林　區　三　龍　街　２０－１　號

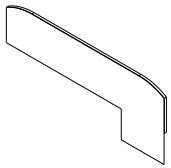
電話:(02)8688-8680　　傳真:(02)8688-8678

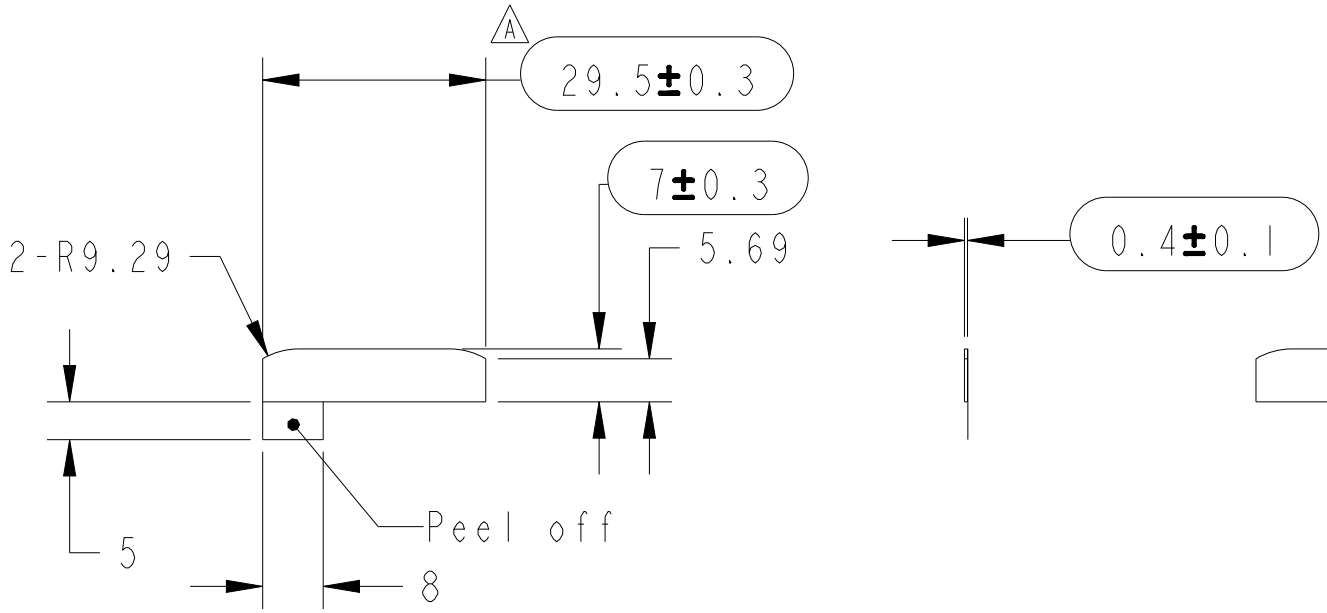
中　華　民　國 114 年 09 月 09 日

俐元企業股份有限公司

2025

REV	DATE	DESCRIPTION	DRAFT	APPROVED
0	2025-06-23	INITIAL RELEASE	Laslie Chen	
A	2025-09-04	MODIFY DIMENSION, PRODUCTION RELEASE	Laslie Chen	Ferris





設計驗證
工程課
2025-09-24
發行

NOTE:
1. Material: 3M VHB, 5915(P)/5915.
   Color: Black.
   Thickness: 0.4 mm (W/O Release Liner).
2. Production by DIE-CUT Mold.
3. RoHS Compliant.

UNLESS OTHERWISE SPECIFIED
ALL DIMENSIONS ARE IN MM.
TOLERANCES:
.X = ± 0.5
.XX = ± 0.30
.XXX = ± 0.150
ANGLE = ± 1.0°
INTERPRET DIM AND TOL
PER ASME Y14.5-2009

THIRD ANGLE PROJECTION

MATERIAL: FINISH:

DRAWN BY: Laslie Chen | 2025-06-23

CHECKED BY: Ferris Tsai | 2025-09-04

APPROVED BY: Laslie Chen | 2025-09-04

FILE NAME: 027_216_TAPE_USB_HUB_COVER

APPROVED NO.:

DIVA Laboratories. Ltd.

PART NAME: TAPE, 3M

PART NUMBER: 3MD695TH010 (M3522)

MFG. PART NUMBER: NA

MODEL NAME:	SIZE:	SCALE:	SHEET:	REV
VM15	A4	1:1	1 OF 1	0

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ASME STANDARD, MM

俐元企業股份有限公司
俐誠企業股份有限公司

成品出廠檢驗表

表單編號：FM-42A

客戶名稱	鈺緯科技開發股份有限公司	訂單號碼				交貨數量		
料號	3MD695TH010	品名規格	3M 5915P 背 格拉信紙 0.4T*29.5mm*7mm			檢驗日期		
序號	規　格	檢　驗　值					檢驗結果	
	依客戶圖面檢驗	1	2	3	4	5	OK	NG
1	0.4 T ±0.10	0.43	0.42	0.44	0.42	0.43	✓	
2	29.5 ±0.30	29.58	29.61	29.58	29.61	29.59	✓	
3	7 ±0.30	7.10	7.11	7.10	7.09	7.11	✓	
4								
5								
6								
7								
8								
9								
10								

主管：　游鈺崧　　品管組長：劉美君　　品檢員：洪筱楓

Science.
Applied to Life.™

ASK A 3M EXPERT

April, 2019

3M™ VHB™ Tape 5915P

Product Description



3M™ VHB™ Tape 5915P is a 0.016 inch (0.4 mm) thick black double coated acrylic foam tape with PCK Paper liner. The modified acrylic adhesive on both sides bonds to a broad range of high, medium and medium/low surface energy substrates including metals, glass and a wide variety of plastics and paints, including many powder coated paints. The very conformable foam provides good contact between substrates even when they are slightly mismatched. 3M™ VHB™ Tape 5915P is part of the 5952 tape family. Each product in this family has modified acrylic adhesive and very conformable foam but varies in thickness, color and liner type.

Product Features

- Fast and easy-to-use permanent bonding method provides high strength and long-term durability
- Virtually invisible fastening keeps surfaces smooth
- Can replace mechanical fasteners (rivets, welding, screws) or liquid adhesives
- Black, 0.016 in (0.4 mm), modified acrylic adhesive and very conformable acrylic foam core bonds to a wide variety of substrates including powder coated paints and irregular surfaces
- Eliminate drilling, grinding, refinishing, screwing, welding and clean-up
- Creates a permanent seal against water, moisture and more by offering better gap filling capabilities
- Pressure sensitive adhesive bonds on contact to provide immediate handling strength
- Allows the use of thinner, lighter weight and dissimilar materials

3M™ VHB™ Tape 5915P

Technical Information Note

The following technical information and data should be considered representative or typical only and should not be used for specification purposes.

Typical Physical Properties

Property	Values	
Color	Black	
Tape Thickness	0.4 mm	0.016 in
Thickness Tolerance	±15 %	
Adhesive Type	Modified Acrylic	
Foam Type	Very Conformable Acrylic Foam	
Density	690 kg/m³	43 lb/ft³
Liner	PCK Paper	
Liner Thickness	0.10 mm	0.004 in
Liner Color	White (printed)	

Typical Performance Characteristics

Property	Values		Method	Dwell/Cure Time	Test Condition	Substrate	Notes
90° Peel Adhesion	21 N/cm	12 lb/in	ASTM D3330	72 hr @ Room Temperature	Room Temperature	Stainless Steel	Jaw speed 12 in/min (304.8 mm/min). Average force to remove is measured.
Normal Tensile	550 kPa	80 lb/in²	ASTM D897	72 hr @ Room Temperature	Room Temperature	Aluminum	1 in² (6.45 cm²), Jaw Speed 2 in/min (50.8 mm/min). Peak force to separate is measured.
Dynamic Overlap Shear	620 kPa	90 lb/in²	ASTM D1002	72 hr @ Room Temperature	Room Temperature	Stainless Steel	1 in² (6.45 cm²), Jaw speed 0.5 in/min (12.7 mm/min). Peak force to separate is measured.
Short Term Temperature Tolerance	149 °C	300 °F					No change in room temperature dynamic shear properties following 4 hours conditioning at indicated temperature with 100 g/static load. (Represents minutes, hours in a process type temperature exposure).
Long Term Temperature Tolerance	121 °C	250 °F					Maximum temperature where tape supports at least 250 g load per 0.5 in² in static shear for 10,000 minutes. (Represents continuous exposure for days or weeks).

3M™ VHB™ Tape 5915P

Typical Performance Characteristics (continued)

Static Shear	Test Condition
1000 g	Room Temperature
500 g	66°C (150°F)
250 g	93°C (200°F)
250 g	121°C (250°F)

Property: Static Shear
Method: ASTM D3654
Substrate: Stainless Steel
notes: Tested at various temperatures and gram loadings. 0.5 in² (3.23 cm²). Will hold listed weight for 10,000 minutes (approximately 7 days).

Available Sizes

Property	Values	
Standard Length	65.8 m	72 yd
Minimum Available Width	6.4 mm	0.25 in
Maximum Available Width	1168 mm	46 in
Normal Slitting Tolerance	±0.79 mm	±1/32 in
Core Size (ID)	76.2 mm	3 in

Available Sizes:

Available Sizes

Tape Thickness inches (mm)	Standard Length yards (meters)	Minimum Width inches (mm)	Maximum Width inches (mm)	Maximum Roll Length: Width 1/4"up to 3/8" (6.4mm up to 9.5mm) yards (meters)	Maximum Roll Length: Width >3/8" up to 1/2" (>9.5mm up to 12.7mm) yards (meters)	Maximum Roll Length: Width 1/2" and wider (12.7mm and wider) yards (meters)
< 0.015 (0.4)	72 (65.8)	0.5 (13)	46 (1168)	N/A N/A	N/A N/A	See Note Below
0.015/0.016 (0.4)	72 (65.8)	0.25 (6)	48* (1219)	144 (131.7)	175 (160.0)	360 (329.2)
0.025 (0.6)	72 (65.8)	0.25 (6)	48* (1219)	72 (65.8)	108 (98.8)	175 (160.0)
0.032 (0.8)	72 (65.8)	0.25 (6)	48 (1219)	72 (65.8)	108 (98.8)	175 (160.0)
0.040 (1.0)	36 (32.9)	0.25 (6)	48 (1219)	72 (65.8)	108 (98.8)	144 (131.7)
0.045 (1.1)	36 (32.9)	0.25 (6)	48 (1219)	72 (65.8)	108 (98.8)	144 (131.7)
0.062 (1.6)	36 (32.9)	0.25 (6)	46 (1168)	72 (65.8)	72 (65.8)	108 (98.8)
0.090 (2.3)	36 (32.9)	0.25 (6)	46 (1168)	36 (32.9)	36 (32.9)	72 (65.8)

*Exception – 5915 (P) max. width 46 inches (1168 mm); 5925 (P) max. width 47 inches (1194 mm).
Note: 5952 family tapes thinner than 0.015 in (0.4 mm) have max. length 360 yd (329.2 m) for widths 1 in (25 mm) to 8 in (203 mm) and 180 yd (164.6 m) for all other widths.

Converted Parts

In addition to standard and custom roll sizes available from 3M through the distribution network, 3M™ VHB™ Tapes are also available in limitless shapes and sizes through the 3M Converter network. For additional information, contact 3M Converter Markets at 1-800-223-7427 or on the web at www.3M.com/converter.

3M™ VHB™ Tape 5915P

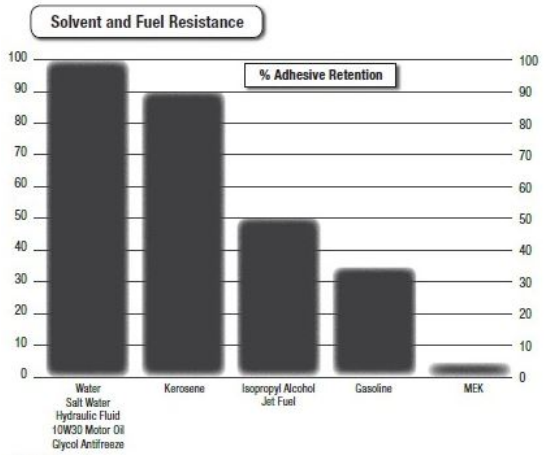
UL746C Listings

3M™ VHB™ Tapes
UL746C Listings - File MH 17478
Category QOQW2 Component - Polymeric Adhesive Systems, Electrical Equipment

3M™ VHB™ Tapes/ Product Families	Substrates	Temperature Rating Minimum	Maximum
4919F, 4926, 4936, 4936F, 4941, 4941F, 4947F, 4956, 4956F, 4979F	Ceramic	-35°C	110°C
	Aluminum, Galvanized Steel, Stainless Steel, Enameled Steel, Nickel Coated ABS, Glass (with or without Silane Coating) PVC, Glass/Epoxy, PBT, Polycarbonate, Acrylic/Polyurethane Paint, Polyester Paint	-35°C	90°C
	ABS	-35°C	75°C
4991	Polycarbonate, Aluminum, Acrylic/ Polyurethane Paint, Polyester Paint	-35°	90°C
5915, 5915P, 5915WF 5925, 5925P, 5925WF, 5930, 5930P, 5930WF, 5952, 5952P, 5952WF, 5962, 5962P, 5962WF	Polycarbonate, Primer 94 Coated Polycarbonate, Aluminum, Acrylic/ Polyurethane Paint, Galvanized Steel, Polyester Paint, Epoxy Paint, Silane Coated Glass, Uncoated Glass, Stainless Steel, Enameled Steel, Glass Epoxy, Polybutylene Terephthalate, Nylon, Polyphenelene Ether (PPE), Acrylic	-35°C	90°C
	Rigid PVC, ABS	-35°C	75°C
5952, 5952P, 5952WF	Cellulose Acetate Butyrate	-35°C	90°C
RP16	Aluminum, Silane Coated Glass	-35°C	90°C
	PVC, ABS	-35°C	75°C
RP16, RP25, RP32, RP45, RP62	Galvanized Steel, Enameled Steel, Nylon, Polycarbonate, Glass Epoxy, Phenolic, PPE/PS Blend, PBT, Epoxy Paint, Polyester Paint, Adhesion Promoter 111 Coated Epoxy Paint, Promoter 111 Coated Polyester Paint, Acrylic Urethane Paint, Epoxy/ Polyester Paint	-35°C	90°C
RP62	Stainless Steel, Glass, Acrylic	-35°C	90°C
	PVC, ABS	-35°C	75°C

A current list can be found at www.ul.com (select certifications, search file MH17478)

Solvent and Fuel Resistance



Test Method

- Tape between stainless steel and aluminum foil
- 72 hours dwell at room temperature
- Solvent immersion for 72 hours
- Test within 45 minutes after removing from solvent
- 90° peel angle
- 12 in/min rate of peel
- Peel adhesion compared to control

Note: Continuous submersion in chemical solutions is not recommended. The above information is presented to show that occasional chemical contact should not be detrimental to tape performance in most applications in ordinary use.

3M™ VHB™ Tape 5915P

Additional Typical Performance Characteristics

Property	Values	Method	Test Condition
Water Vapor Transmission Rate	See 3M™ VHB™ Tape 5952 g/m²/24 hr	ASTM F1249	@ 38°C/100% RH
Shear Modulus	See 3M™ VHB™ Tape 5952 Pa		
Poisson's Ratio	See 3M™ VHB™ Tape 5952		
Coefficient of Thermal Expansion	See 3M™ VHB™ Tape 5952 m/m/°C		

Electrical and Thermal Properties

Property	Values	Method	Test Condition
Dielectric Constant	See 3M™ VHB™ Tape 5952	ASTM D150	1 KHz, Room Temperature
Dielectric Constant	See 3M™ VHB™ Tape 5952	ASTM D150	1MHz, Room Temperature
Dissipation Factor	See 3M™ VHB™ Tape 5952	ASTM D150	1 KHz, Room Temperature
Dissipation Factor	See 3M™ VHB™ Tape 5952	ASTM D150	1MHz, Room Temperature
Dielectric Strength	See 3M™ VHB™ Tape 5952 V/µm	ASTM D140	
Thermal Conductivity (k value)	See 3M™ VHB™ Tape 5952 W/m/K		
Volume Resistivity	See 3M™ VHB™ Tape 5952 Ω-cm	ASTM D257	Room Temperature
Surface Resistivity	See 3M™ VHB™ Tape 5952 Ω/sq	ASTM D257	Room Temperature

3M™ VHB™ Tape 5915P

Design Considerations

Adhesion to the substrate is important in achieving bonding success. Adhesives must flow onto the substrate surfaces in order to achieve intimate contact area and allow the molecular force of attraction to develop. The degree of flow of the adhesive on the substrate is largely determined by the surface energy of the substrate. 3M™ VHB™ 5952 family tapes bond well to high (HSE), medium (MSE), and medium/low (M/LSE) surface energy materials. The image below shows typical materials in these categories.

Achieving good contact is also important. The necessary thickness of tape depends on the rigidity of substrates and their flatness irregularity. While the 3M™ VHB™ Tapes will conform to a certain amount of irregularity, they will not flow to fill gaps between the materials. For bonding rigid materials with normal flatness, consider use of tapes with thickness of 45 mils (1.1 mm) or greater. As the substrate flexibility increases thinner tapes can be considered.

Using the right amount of tape is important to handle the expected stresses. Because 3M™ VHB™ Tapes are viscoelastic by nature their strength and stiffness is a function of the rate at which they are stressed. They behave stronger with relatively faster rate of stress load (dynamic stresses) and will tend to show creep behavior with stress load acting over a long period of time (static stresses). As a general rule, for static loads, approximately four square inches of tape should be used for each pound (57 cm² of tape per kg) of weight to be supported in order to prevent excessive creep. For dynamic loads a useful design factor is 12 lb/in2 (85 kPa) for most dynamic stresses in general applications.

Allow for thermal expansion/contraction. 3M™ VHB™ Tapes can perform well in applications where two bonded surfaces may expand and contract differentially. Assuming good adhesion to the substrates, the tapes can typically tolerate differential movement in the shear plane up to 3 times their thickness.

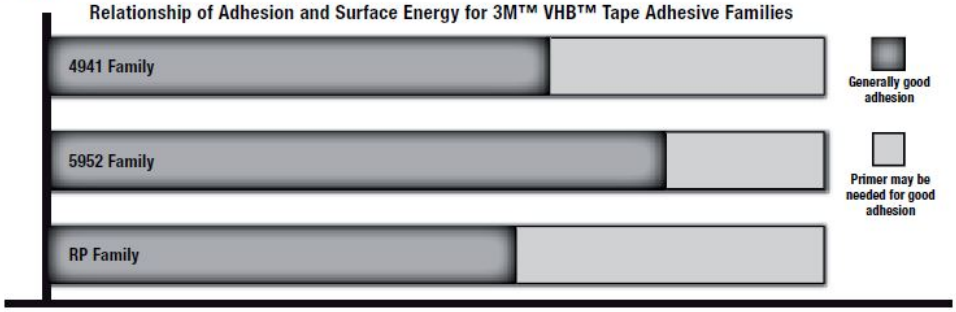
Bond Flexibility: While an advantage for many applications where allowing differential movement is a benefit, the tape bonds are typically more flexible than alternative bonding methods. Suitable design modifications or periodic use of rigid fasteners or adhesives may be needed if additional stiffness is required.

Performance in Severe Cold Temperature can be challenging. Applications which require performance at severe cold temperatures must be thoroughly evaluated by the user if the intended use will subject the tape product to high impact stresses. A technical bulletin “3M™ VHB™ Tape Cold Temperature Performance” (70-0707-3991-0) is available for additional information.



This illustration demonstrates the effect of surface energy on adhesive interfacial contact. High surface energy materials draw the adhesive closer for high bond strength.

Relationship of Adhesion and Surface Energy for 3M™ VHB™ Tape Adhesive Families



1100-400 (High)	50-42	39-38 (Medium)	37-36	33-18 (Low)
Surface Energy (Dynes/cm)				
Aluminum	Polyimide	ABS	PVA	EVA
Stainless Steel	Phenolic	Polycarbonate	Polystyrene	Polyethylene
Copper	Nylon	PVC	Acetal	Polypropylene
Zinc	Alkyd Enamel	PPE	PVDF Paint	PVF
Tin	Polyester	Acrylic	Powder Paint	Silicone
Lead	Epoxy Paint	PU Enamel		PTFE
Anodized Aluminum	Polyurethane	Powder Paint		
Glass				

NOTES: There are a wide variety of formulations, surfaces finishes and surface treatments available on substrate materials which can affect adhesion. This chart is intended to provide only a rough estimate of the adhesion levels which can be expected on some common materials relative to a reference surface such as aluminum.

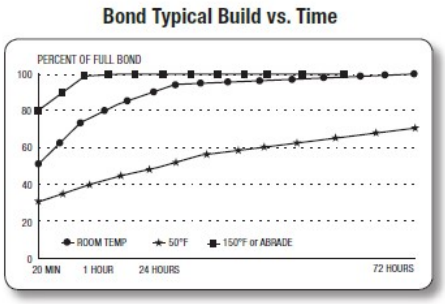
Foam type can affect and/or limit maximum adhesive strength.

3M™ VHB™ Tape 5915P

Handling/Application Information

Application Techniques

Clean: Most substrates are best prepared by cleaning with a 50:50 mixture of isopropyl alcohol (IPA*) and water prior to applying 3M™ VHB™ Tapes.
Exceptions to the general procedure that may require additional surface preparation include:
• Heavy Oils: A degreaser or solvent-based cleaner may be required to remove heavy oil or grease from a surface and should be followed by cleaning with IPA/water.
• Abrasion: Abrading a surface, followed by cleaning with IPA/water, can remove heavy dirt or oxidation and can increase surface area to improve adhesion.
• Adhesion Promoters: Priming a surface can significantly improve initial and ultimate adhesion to many materials such as plastics and paints.
• Porous surfaces: Most porous and fibered materials such as wood, particleboard, concrete, etc. need to be sealed to provide a unified surface.
• Unique Materials: Special surface preparation may be needed for glass and glass-like materials, copper and copper containing metals, and plastics or rubber that contain components that migrate (e.g. plasticizers).
Refer to 3M Technical Bulletin “Surface Preparation for 3M™ VHB™ Tape Applications” for additional details and suggestions. (70-0704-8701-5)
*Note: These cleaner solutions contain greater than 250 g/l of volatile organic compounds (VOC). Please consult your local Air Quality Regulations to be sure the cleaner is compliant. When using solvents, be sure to follow the manufacturer’s precautions and directions for use when handling such materials.
Pressure: Bond strength is dependent upon the amount of adhesive-to-surface contact developed. Firm application pressure develops better adhesive contact and helps improve bond strength. Typically, good surface contact can be attained by applying enough pressure to insure that the tape experiences approximately 15 psi (100 kPa) pressure. Either roller or platen pressure can be used. Note that rigid surfaces may require 2 or 3 times that much pressure to make the tape experience 15 psi.
Temperature: Ideal application temperature range is 70°F to 100°F (21°C to 38°C). Pressure sensitive adhesives use viscous flow to achieve substrate contact area. Minimum suggested application temperature for the 3M™ VHB™ Tape 5952 family is 50°F (10°C). Minimum application temperature does vary by 3M™ VHB™ tape family and ranges from 32°F to 60°F (0°C to 15°C)
Note: Initial tape application to surfaces at temperatures below these suggested minimums is not recommended because the adhesive becomes too firm to adhere readily. However, once properly applied, low temperature holding is generally satisfactory. To obtain good performance with all 3M™ VHB™ Tapes, it is important to ensure that the surfaces are dry and free of condensed moisture.
Time: After application, the bond strength will increase as the adhesive flows onto the surface (also referred to as “wet out”). At room temperature approximately 50% of ultimate bond strength will be achieved after 20 minutes, 90% after 24 hours and 100% after 72 hours. This flow is faster at higher temperatures and slower at lower temperatures. Ultimate bond strength can be achieved more quickly (and in some cases bond strength can be increased) by exposure of the bond to elevated temperatures (e.g. 150°F [66°C] for 1 hour). This can provide better adhesive wetout onto the substrates. Abrasion of the surfaces or the use of primers/ adhesion promoters can also have the effect of increasing bond strength and achieving ultimate bond strength more quickly.



Storage and Shelf Life

All 3M™ VHB™ Tapes have a shelf life of 24 months from date of manufacture when stored at 40°F to 100°F (4°C to 38°C) and 0-95% relative humidity. The optimum storage conditions are 72°F (22°C) and 50% relative humidity.
Performance of tapes is not projected to change even after shelf life expires; however, 3M does suggest that 3M™ VHB™ Tapes are used prior to the shelf life date whenever possible.
The manufacturing date is available on all 3M™ VHB™ Tapes as the lot number, typically marked on the core or on a label on the outer roll lap. The lot number, typically a 4 digit code, is a Julian date (Y D D D). The first digit refers to the year of manufacture, the last 3 digits refer to the days after January 1. Example: A lot number of 7266 (or 17266) would translate to a date of manufacture of Sept. 23 (266th day of year) in 2017.

Industry Specifications

UL 746C (File MH 17478)

Trademarks

3M and VHB are trademarks of 3M Company.

References

Safety Data Sheet (SDS)

https://www.3m.com/3M/en_US/company-us/SDS-search/results/?gsaAction=msdsSRA&msdsLocale=en_US&co=ptn&q=5915P

Family Group

	5906	5908	5909	5915	5915P	5915WF	5925	5925P	5925WF	5930	5907
Color	Black	Black	Black	Black	Black	White	Black	Black	White	Black	Black
Tape Thickness (mm)	0.15	0.25	0.3	0.4	0.4	0.4	0.6	0.6	0.6	0.8	0.2
Adhesive Type	Modified Acrylic	Modified Acrylic	Modified Acrylic	Modified Acrylic	Modified Acrylic	Modified Acrylic	Modified Acrylic	Modified Acrylic	Modified Acrylic	Modified Acrylic	Modified Acrylic
Foam Type	Very Conformable Acrylic Foam	Very Conformable Acrylic Foam	Very Conformable Acrylic Foam	Very Conformable Acrylic Foam	Very Conformable Acrylic Foam	Very Conformable Acrylic Foam	Very Conformable Acrylic Foam	Very Conformable Acrylic Foam	Very Conformable Acrylic Foam	Very Conformable Acrylic Foam	Very Conformable Acrylic Foam
Liner	PET	PET	PET	PE Film	PCK Paper	PE Film	PE Film	PCK Paper	PE Film	PE Film	PET
Liner Thickness (mm)	0.08	0.08	0.08	0.13	0.1	0.13	0.13	0.1	0.13	0.13	0.08
Liner Color	Clear	Clear	Clear	Red (printed)	White (printed)	Red (printed)	Red (printed)	White (printed)	Red (printed)	Red (printed)	Clear

ISO Statement

This Industrial Adhesives and Tapes Division product was manufactured under a 3M quality system registered to ISO 9001 standards.

Technical Information

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Warranty, Limited Remedy, and Disclaimer

3M warrants for 24 months from the date of manufacture that 3M™ VHB™ Tape will be free of defects in material and manufacture. 3M MAKES NO OTHER WARRANTIES OR CONDITIONS, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OR CONDITION OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, OR ARISING OUT OF A COURSE OF DEALING, CUSTOM, OR USAGE OF TRADE. This warranty does not cover damage resulting from the use or inability to use 3M™ VHB™ Tape due to misuse, workmanship in application, or application or storage not in accordance with 3M recommended procedures (except to the extent 3M approves and issues a specific application warranty, for which the customer must apply, receive 3M approval, and meet all applicable warranty and process requirements, the additional details, terms, and conditions of which are available from 3M). If a 3M product does not conform to this warranty, then the sole and exclusive remedy is, at 3M's option, replacement of the 3M product or refund of the purchase price.

Limitation of Liability

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Industrial Adhesives and Tapes Division
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St. Paul, MN 55144-1000
800-362-3550
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寶燕彩藝股份有限公司
產品檢查表

試驗項目:白格單離70g　　#13　　客戶：俐元

地　　址:桃園縣龜山鄉文化村頂湖一街53號　　1100823011-6

電　　話:(03)3283501-3 (03)3282896-7

傳 真 機:(03)3284133　　日期： 110年12月02日

項　目 PROPERTIES	規　格	結 果	檢驗方法	備註
基　重 BASIC WEIGHT	65+-7 g/m2	66.1	IQC-SSQ003	
厚　度 THICKNESS	55+-10 1／1000mm	54+2-2	FQC-SSQ081	
剝離力 TESA RELEASE FORCE	25↓ g／in	4	FQC-SSQ063	
殘 餘 力 REMAIN RELEASE	80↑ ％	96	FQC-SSQ082	
外　觀 APPEARANCE	良好 目視	良好	IQC-SSQ002	
寬　度 WIDTH	±2mm	1000	IQC-SSQ016	
長　度 LENGTH	±1%			
	合格判定	合格■	不合格□	

品管主管: 黃守謙　　檢驗員:邱彤姝

Safety Data Sheet

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This safety data sheet (SDS) is provided as a courtesy in response to a customer request. This product is not regulated under, and a SDS is not required for this product by the Regulation of Labelling and Hazard Communication of Hazardous Chemicals promulgated by Ministry of Labor on June 27, 2014 by the order of Lao-Zhi-Tzu-No.10302007861 because, when used as recommended or under ordinary conditions, it should not present a health and safety hazard. However, use or processing of the product not in accordance with the product's recommendations or not under ordinary conditions may affect the performance of the product and may present potential health and safety hazards.

Document Group:	28-4903-2	**Version Number:**	2.00
Issue Date:	2019/04/23	**Supercedes Date:**	2018/10/04

This Safety Data Sheet has been prepared in accordance with the 'Regulation of Labelling and Hazard Communication of Hazardous Chemicals' (by Ministry of Labor on June 27, 2014)

SECTION 1: Identification

1.1. Chemicals Name
3M™ VHB™ Tapes - 5906, 5907, 5908, 5909, 5913, 5915, 5915P, 5915WF, 5925, 5925P, 5925WF, 5930, 5930P, 5930WF, 5952, 5952P, 5952WF, 5962, 5962P, 5962WF, H5520SB

1.2. Recommended use and restrictions on use

Recommended use
Tape

1.3. Details of the supplier of the safety data sheet

Name:	3M Taiwan LTD
ADDRESS:	3F., No. 198, Jingmao 2nd Rd., Nangang Dist., Taipei City 11568, Taiwan (R.O.C.)
Telephone:	(02) 2785-9338
Website:	www.3m.com.tw

1.4. Emergency telephone number
Emergency Telephone:886-3-4783600, 8:00AM - 4:30PM
Fax number:(03) 475-0924, 475-0904

SECTION 2: Hazard identification

2.1. Classification of the substance or mixture
This product is considered to be an article and is exempt from GHS classification.

2.2. Label elements
SIGNAL WORD
Not applicable.

Symbols
Not applicable.

Pictograms
Not applicable

2.3. Other hazards
None known

SECTION 3: Composition/information on ingredients

This material is a mixture.

Ingredient	C.A.S. No.	% by Wt
Foam Carrier	Trade Secret	50 - 99
Acrylic Adhesive	Trade Secret	1 - 50

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation:
No need for first aid is anticipated.

Skin Contact:
No need for first aid is anticipated.

Eye Contact:
No need for first aid is anticipated.

If Swallowed:
No need for first aid is anticipated.

4.2. Most important symptoms and effects, both acute and delayed
See Section 11.1. Information on toxicological effects.

4.3. Advice to protect the rescuer and special warning to doctors
Refer to other sections of this SDS for information regarding physical and health hazards, respiratory protection, ventilation and personal protective equipment.

4.4. Indication of any immediate medical attention and special treatment required
Not applicable

SECTION 5: Fire-fighting measures

5.1. Suitable extinguishing media
In case of fire: Use a fire fighting agent suitable for ordinary combustible material such as water or foam to extinguish.

5.2. Special hazards arising from the substance or mixture
None inherent in this product.

Hazardous Decomposition or By-Products

Substance	Condition

Hydrocarbons	During Combustion
Carbon monoxide	During Combustion
Carbon dioxide	During Combustion

5.3. Special protective actions for fire-fighters
Wear full protective clothing, including helmet, self-contained, positive pressure or pressure demand breathing apparatus, bunker coat and pants, bands around arms, waist and legs, face mask, and protective covering for exposed areas of the head.

5.4. Special equipment for the protection of fire-fighters
No information is available.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures
Not applicable.

6.2. Environmental precautions
Not applicable.

6.3. Methods and material for containment and cleaning up
Not applicable.

SECTION 7: Handling and storage

7.1. Precautions for safe handling
This product is considered to be an article which does not release or otherwise result in exposure to a hazardous chemical under normal use conditions.

7.2. Conditions for safe storage including any incompatibilities
Not applicable.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational exposure limits
No occupational exposure limit values exist for any of the components listed in Section 3 of this SDS.

Biological limit values
No biological limit values exist for any of the components listed in Section 3 of this safety data sheet.

8.2. Exposure controls

8.2.1. Engineering controls
Not applicable.

8.2.2. Personal protective equipment (PPE)

Eye/face protection

Eye protection not required.

Skin/hand protection

No chemical protective gloves are required.

Respiratory protection

Respiratory protection is not required.

8.3. Hygiene Measures
See Section 7.1 Precautions for safe handling

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	Solid
Specific Physical Form:	Roll of Tape
Appearance/Odor	black or white foam tape on paper or film liner.
Odor threshold	*Not Applicable*
pH	*Not Applicable*
Melting point/Freezing point	*Not Applicable*
Boiling point/Initial boiling point/Boiling range	*Not Applicable*
Flash Point	*Not Applicable*
Evaporation rate	*Not Applicable*
Flammability (solid, gas)	Not Classified
Flammable Limits(LEL)	*Not Applicable*
Flammable Limits(UEL)	*Not Applicable*
Vapor Pressure	*Not Applicable*
Vapor Density	*Not Applicable*
Density	*Not Applicable*
Relative Density	*Not Applicable*
Water solubility	Nil
Solubility- non-water	*Not Applicable*
Partition coefficient: n-octanol/ water	*Not Applicable*
Autoignition temperature	*Not Applicable*
Decomposition temperature	*Not Applicable*
Viscosity	*Not Applicable*
Volatile Organic Compounds	*Not Applicable*
Percent volatile	*Not Applicable*
VOC Less H2O & Exempt Solvents	*Not Applicable*

SECTION 10: Stability and reactivity

10.1. Reactivity
This material is considered to be non reactive under normal use conditions.

10.2. Chemical stability
Stable.

10.3. Possibility of hazardous reactions
Hazardous polymerization will not occur.

10.4. Conditions to avoid
None known.

10.5. Incompatible materials
None known.

10.6. Hazardous decomposition products

Substance	Condition
None known.	

Refer to section 5.2 for hazardous decomposition products during combustion.

Under recommended usage conditions, hazardous decomposition products are not expected. Hazardous decomposition products may occur as a result of oxidation, heating, or reaction with another material.

SECTION 11: Toxicological information

The information below may not be consistent with the material classification in Section 2 if specific ingredient classifications are mandated by a competent authority. In addition, toxicological data on ingredients may not be reflected in the material classification and/or the signs and symptoms of exposure, because an ingredient may be present below the threshold for labeling, an ingredient may not be available for exposure, or the data may not be relevant to the material as a whole.

11.1. Information on Toxicological effects

Signs and Symptoms of Exposure

Based on test data and/or information on the components, this material may produce the following health effects:

Inhalation:
No health effects are expected.

Skin Contact:
No health effects are expected.

Eye Contact:
No health effects are expected.

Ingestion:
No health effects are expected.

Chronic toxicity or long term toxicity

Additional Information:
This product, when used under reasonable conditions and in accordance with the directions for use, should not present a health hazard. However, use or processing of the product in a manner not in accordance with the product's directions for use may affect the performance of the product and may present potential health and safety hazards.

Toxicological Data
If a component is disclosed in section 3 but does not appear in a table below, either no data are available for that endpoint or the data are not sufficient for classification.

Acute Toxicity

Name	Route	Species	Value
Overall product	Ingestion		No data available; calculated ATE >5,000 mg/kg

ATE = acute toxicity estimate

Skin Corrosion/Irritation
For the component/components, either no data are currently available or the data are not sufficient for classification.

Serious Eye Damage/Irritation
For the component/components, either no data are currently available or the data are not sufficient for classification.

Skin Sensitization
For the component/components, either no data are currently available or the data are not sufficient for classification.

Respiratory Sensitization
For the component/components, either no data are currently available or the data are not sufficient for classification.

Germ Cell Mutagenicity
For the component/components, either no data are currently available or the data are not sufficient for classification.

Carcinogenicity
For the component/components, either no data are currently available or the data are not sufficient for classification.

Reproductive Toxicity

Reproductive and/or Developmental Effects
For the component/components, either no data are currently available or the data are not sufficient for classification.

Target Organ(s)

Specific Target Organ Toxicity - single exposure
For the component/components, either no data are currently available or the data are not sufficient for classification.

Specific Target Organ Toxicity - repeated exposure
For the component/components, either no data are currently available or the data are not sufficient for classification.

Aspiration Hazard
For the component/components, either no data are currently available or the data are not sufficient for classification.

Please contact the address or phone number listed on the first page of the SDS for additional toxicological information on this material and/or its components.

SECTION 12: Ecological information

The information below may not be consistent with the material classification in Section 2 if specific ingredient classifications are mandated by a competent authority. Additional information leading to material classification in Section 2 is available upon request. In addition, environmental fate and effects data on ingredients may not be reflected in this section because an ingredient is present below the threshold for labeling, an ingredient is not expected to be available for exposure, or the data is considered not relevant to the material as a whole.

12.1. Toxicity

Acute aquatic hazard:
Not acutely toxic to aquatic life by GHS criteria.

Chronic aquatic hazard:
Not chronically toxic to aquatic life by GHS criteria.

No product test data available

12.2. Persistence and degradability
No test data available

12.3. Bioaccumulative potential
No test data available

12.4. Mobility in soil
Please contact manufacturer for more details

12.5 Other adverse effects
No information available

SECTION 13: Disposal considerations

13.1. Disposal methods
Dispose of contents/ container in accordance with the local/regional/national/international regulations.

Prior to disposal, consult all applicable authorities and regulations to insure proper classification. Dispose of waste product in a permitted industrial waste facility. As a disposal alternative, incinerate in a permitted waste incineration facility. Proper destruction may require the use of additional fuel during incineration processes. If no other disposal options are available, waste product may be placed in a landfill properly designed for industrial waste.

SECTION 14: Transport Information

14.1. International Regulations
Not hazardous for transportation.

UN No.: Not applicable
UN Proper shipping name: Not applicable
Transportation Class (IMO): Not applicable
Transportation Class (IATA): Not applicable
Packing Group: Not applicable
Marine pollutant: Not applicable
Specific transport measures and precautionary conditions: Not applicable

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

Applicable regulations:
Taiwan. Methods and Facilities Standards for the Storage, Clearance and Disposal of Industrial Waste (EPA Order No. 0950098458C, Table 1 Process Hazardous Industrial Waste, December 14, 2006)

Occupational Safety and Health Act

15.2. Global Inventory Status:
Australian Inventory of Chemical Substances: Exempt from Inventory Listing
Canadian Domestic Substances List: Exempt from Inventory Listing
EU Directive 2002/95/EC Restriction of Hazardous Substances (RoHS): Meets
European Inventory of Existing Commercial Chemical Substances: Exempt from Inventory Listing
Inventory of Existing Chemical Substances in China (IECSC): Exempt from Inventory Listing

Japan Existing & New Chemical Substances (ENCS): Exempt from Inventory Listing
Korean Existing Chemicals Inventory: Exempt from Inventory Listing
Philippine Inventory of Chemicals and Chemical Substances: Exempt from Inventory Listing
Toxic Substances Control Act: Exempt from Inventory Listing

SECTION 16: Other information

16.1. Literature references

Organization that prepared the SDS

Name:	3M Taiwan LTD
Address:	3F., No. 198, Jingmao 2nd Rd., Nangang Dist., Taipei City 11568, Taiwan (R.O.C.)
Telephone Number:	886 3 478 3600 #388

Person who prepared the SDS

Title:	Senior Product Responsibility Liaison
Name:	Sunny Chang

Date that the SDS was prepared:
2019/04/23

Revision information:
Section 01: Address information was modified.
Section 01: Company Telephone information was modified.

DISCLAIMER: The information on this Safety Data Sheet is based on our experience and is correct to the best of our knowledge at the date of publication, but we do not accept any liability for any loss, damage or injury resulting from its use (except as required by law). The information may not be valid for any use not referred to in this Data Sheet or use of the product in combination with other materials. For these reasons, it is important that customers carry out their own test to satisfy themselves as to the suitability of the product for their own intended applications.

3M Taiwan SDSs are available at www.3m.com.tw

寶燕彩藝股份有限公司

安全資料表(SDS)

一、 物品與廠商資料

物品名稱：白格單離 70g #13
物品編號：
製造商或供應商名稱：寶燕彩藝股份有限公司
製造商或供應商地址：桃園縣龜山鄉文化村頂湖一街 53 號
緊急聯絡電話：(03)3282896-7
傳真電話：(03)3961431

二、 危害辨識資料

最重要危害效應	健康危害效應：無
	環境影響：無
	物理性及化學性危害：無
	特殊危害：無
主要症狀：無	
物品危害分類：無	

三、 成分辨識資料

中英文名稱：白格單離 70g #13
同義名稱：
化學式：
化學文摘社登記號碼(CAS No.)：
成份百分比(%)：紙 95%↑ 離型劑 SI 0.1%↑

四、 急救措施

不同暴露途徑之急救方法： •吸入：搬移到新鮮空氣處 •皮膚接觸：與熱熔融態接觸後，儘速以冷水沖洗 •眼睛接觸：儘速以冷水沖洗 •食入：請教醫師
最重要症狀及危害效應：無
對急救人員之防護：無

對醫師之指示：無

五、 滅火措施

適用滅火劑：水、二氧化碳、化學乾粉、泡沫
滅火時可能遭遇之特殊危害：刺激性的氣體或濃煙
特殊滅火程序：一般紙類滅火程序即可
消防人員之特殊防護設備：無

六、 洩漏處理辦法

個人應注意事項：無
環境應注意事項：不要沖入水溝或下水道中，避免影響環境
清理方法：以一般清掃工具整理打掃

七、 安全處置與儲存辦法

處置： a.加工時，應保持室內空氣之流通 b.預防靜電的累積
儲存： a.製品需儲存於陰涼. 通風良好處 b.遠離熱源、引火源、可燃物及不相容物 c.儲區須時常清掃並結構適宜，以避免粉塵累積

八、 暴露預防措施

工程控制：避免接觸熱熔融態之物質
控制參數：無 ・八小時日時量平均容許濃度/短時間時量平均容許濃度/最高容許濃度：無 ・生物指標：無
個人防護設備： ・呼吸防護：不需要 ・手部防護：手套（若需接觸熱熔融態物質時） ・眼睛防護：安全眼鏡 ・皮膚及身體防護：不需要
衛生措施：減少與皮膚的接觸，並在接觸後用水清洗之

九、 物理及化學性質

物質狀態：固體	形狀：
顏色：	氣味：無氣味
ＰＨ值：N/A	沸點：N/A
熔點：	蒸發速率：N/A
自燃溫度：	爆炸界限：N/A

蒸氣壓：N/A	蒸氣密度：N/A
密度：	水中溶解度：不溶

十、 安定性及反應性

安定性：安定
特殊狀況下可能之危害反應：無
應避免之狀況：禁在劇烈熱中
應避免之物質：禁在劇烈熱中
危害分解物：無

十一、 毒性資料

急毒性：無
局部效應：無
致敏感性：無
慢毒性或長期毒性：無
特殊效應：對人體不會造成危害

十二、 生態資料

生態毒性：不溶於水中，對水中魚類及微生物沒有危害
持久性及降解性：半衰期(空氣)： 半衰期(水表面)： 半衰期(地下水)： 半衰期(土壤)：
生物蓄積性：

十三、 廢棄處置辦法

廢棄處置方法： a.處理前，參考現行法規 b.可回收再利用或採安全之焚化、衛生掩埋處理

十四、 運送資料

國際運送規定：依政府及當地專業行政機構使用被認可之處理方法
聯合國編號：無
國內運送規定：無
特殊運送方法及注意事項：製品需儲存陰涼通風地區遠離易燃物或熱源與火源

十五、 法規資料

適用法規：本表所列資料，僅代表通常對 PP、PE 的認識，並不作為這些性質的保證，

相關責任原料購買者應參考現行之法令與規範為之。

十六、 其他資料

參考文獻		
製表單位	寶燕彩藝股份有限公司	
製表人	職稱：經理	姓名（簽章)：黃守謙
製表日期	2022/08/03	

Test Report

No.: SHAEC24028136901 **Date:** Dec 14, 2024

Client Name: 3M CHINA LIMITED

Client Address: 222 TIANLIN ROAD, SHANGHAI

Sample Name: 3M 5952

Model No.: 3M 5952

Client Ref. Information: 5915,5925,5930,5962,5915P,5925P,5930P,5952P,5962P

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

SGS Job No.: SHP24-039450

Sample Receiving Date: Dec 09, 2024

Testing Period: Dec 09, 2024 ~ Dec 14, 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 (Shanghai) Co., Ltd.

Tom Ni

Tom Ni
Approved Signatory

scan to see the report
3B240EC2

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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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中国·上海·徐汇区宜山路889号3号楼 邮编: 200233 t HL (86-21) 61402594 f HL (86-21)61156899 e sgs.china@sgs.com

Member of the SGS Group (SGS SA)

Test Result(s):

Test Part Description：

SN ID	Sample No.	SGS Sample ID	Description
SN1	A1	SHA24-0281369-0001.C001	Black adhesive tape

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 62321-7-2:2017, IEC 62321-6:2015 and IEC 62321-8:2017, analysis was performed by ICP-OES/AAS, UV-Vis and GC-MS.

Test Item(s)	Limit	Unit(s)	MDL	A1
Lead (Pb)	1000	mg/kg	2	ND
Mercury (Hg)	1000	mg/kg	2	ND
Cadmium (Cd)	100	mg/kg	2	ND
Hexavalent Chromium (Cr(VI))	1000	mg/kg	8	ND
Polybromobiphenyl (PBB)	1000	mg/kg	-	ND
Monobrominated biphenyl (MonoBB)	-	mg/kg	5	ND
Dibrominated biphenyl (DiBB)	-	mg/kg	5	ND
Tribrominated biphenyl (TriBB)	-	mg/kg	5	ND
Tetrabrominated biphenyl (TetraBB)	-	mg/kg	5	ND
Pentabrominated biphenyl (PentaBB)	-	mg/kg	5	ND
Hexabrominated biphenyl (HexaBB)	-	mg/kg	5	ND
Heptabrominated biphenyl (HeptaBB)	-	mg/kg	5	ND
Octabrominated biphenyl (OctaBB)	-	mg/kg	5	ND
Nonabrominated biphenyl (NonaBB)	-	mg/kg	5	ND
Decabrominated biphenyl (DecaBB)	-	mg/kg	5	ND
Polybromodiphenyl ether(PBDE)	1000	mg/kg	-	ND
Monobrominated diphenyl ether (MonoBDE)	-	mg/kg	5	ND
Dibrominated diphenyl ether (DiBDE)	-	mg/kg	5	ND
Tribrominated diphenyl ether (TriBDE)	-	mg/kg	5	ND
Tetrabrominated diphenyl ether (TetraBDE)	-	mg/kg	5	ND
Pentabrominated diphenyl ether (PentaBDE)	-	mg/kg	5	ND
Hexabrominated diphenyl ether (HexaBDE)	-	mg/kg	5	ND
Heptabrominated diphenyl ether (HeptaBDE)	-	mg/kg	5	ND

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Test Item(s)	Limit	Unit(s)	MDL	A1
Octabrominated diphenyl ether (OctaBDE)	-	mg/kg	5	ND
Nonabrominated diphenyl ether (NonaBDE)	-	mg/kg	5	ND
Decabrominated diphenyl ether (DecaBDE)	-	mg/kg	5	ND
Bis(2-ethylhexyl) phthalate (DEHP)	1000	mg/kg	50	ND
Butyl benzyl 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) The restriction of DEHP, BBP, DBP and DIBP shall apply to medical devices, including in vitro medical devices, and monitoring and control instruments, including industrial monitoring and control instruments, from 22 July 2021.

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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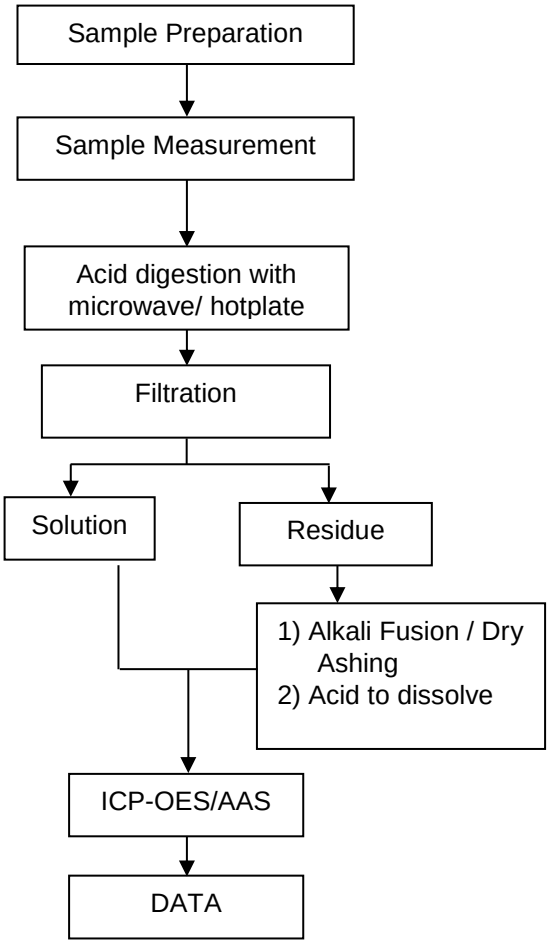
Elements Testing Flow Chart

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



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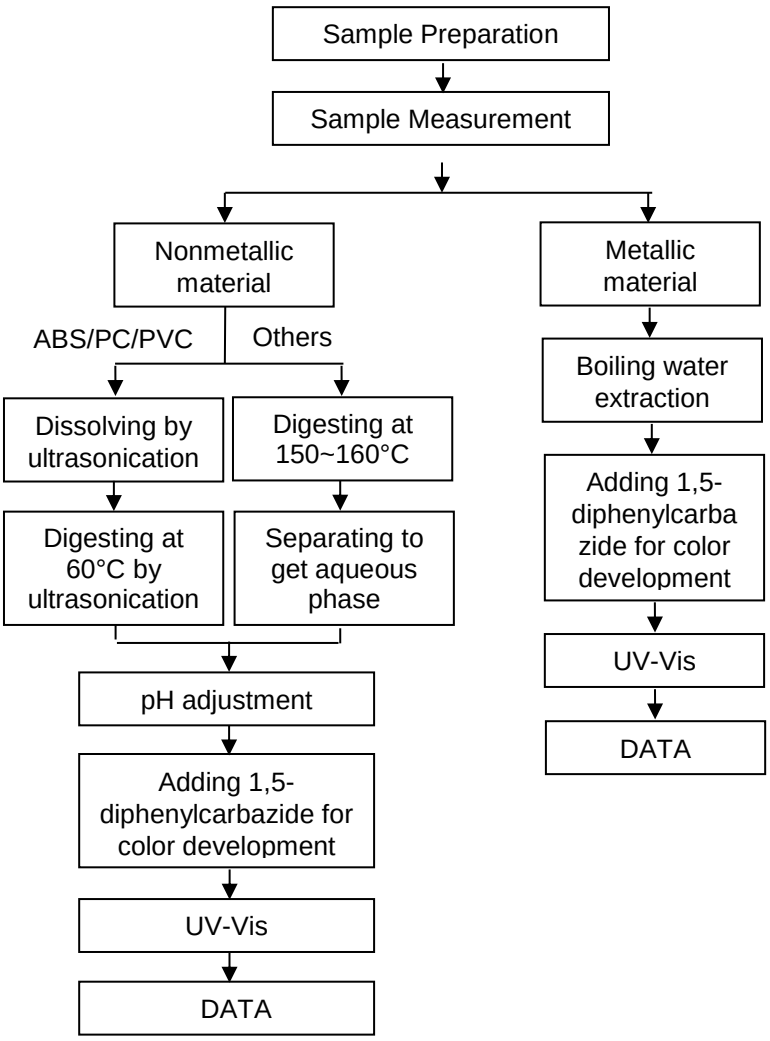
Hexavalent Chromium (Cr(VI)) Testing Flow Chart



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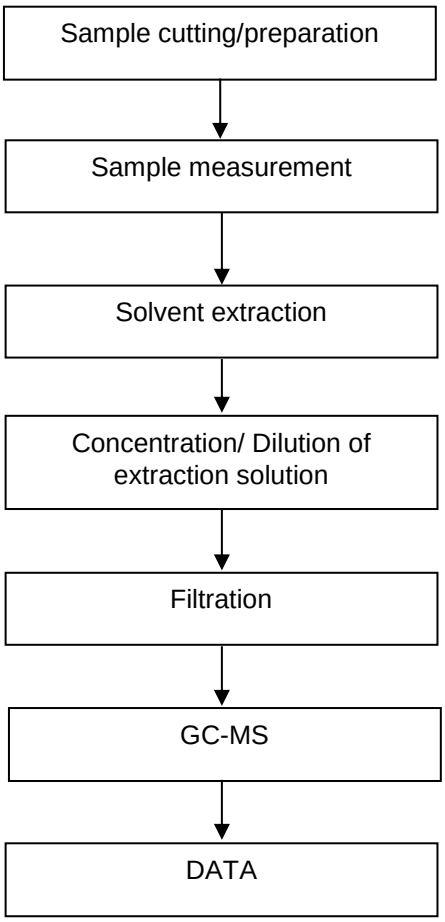
PBB/PBDE Testing Flow Chart



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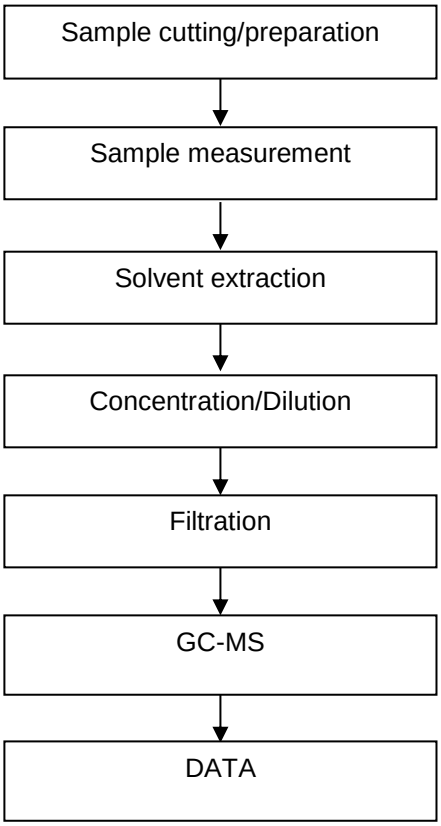
Phthalates Testing Flow Chart



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Sample Photo:



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Test Report

No.: SHAEC24028136903 **Date:** Dec 14, 2024

Client Name: 3M CHINA LIMITED

Client Address: 222 TIANLIN ROAD, SHANGHAI

Sample Name: 3M 5952

Model No.: 3M 5952

Client Ref. Information: 5915,5925,5930,5962,5915P,5925P,5930P,5952P,5962P

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

SGS Job No.: SHP24-039450

Sample Receiving Date: Dec 09, 2024

Testing Period: Dec 09, 2024 ~ Dec 14, 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
Halogen	See Results

Signed for and on behalf of
SGS-CSTC Standards Technical Services (Shanghai) Co., Ltd.

Tom Ni

Tom Ni
Approved Signatory

scan to see the report
5295A01D

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Test Result(s):

Test Part Description：

SN ID	Sample No.	SGS Sample ID	Description
SN1	A1	SHA24-0281369-0001.C001	Black adhesive tape

Remarks:

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

Halogen

Test Method: With reference to EN 14582:2016, analysis was performed by IC.

Test Item(s)	Unit(s)	MDL	A1
Fluorine(F)	mg/kg	20	ND
Chlorine(Cl)	mg/kg	50	293
Bromine(Br)	mg/kg	50	ND
Iodine(I)	mg/kg	50	ND

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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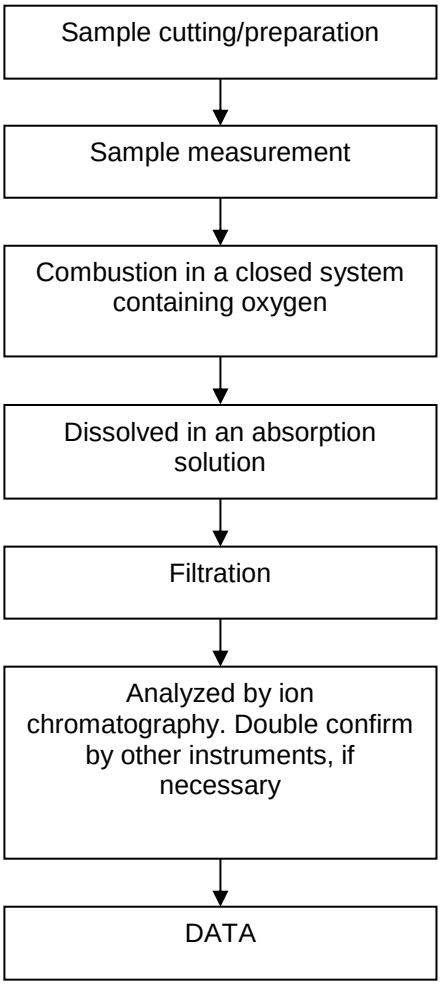
Halogen Testing Flow Chart



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測試報告
Test Report

號碼(No.): ETR25600070　　日期(Date): 10-Jun-2025　　

寶燕彩藝股份有限公司 (PAO YAN TSAE YIH CO., LTD.)
桃園市龜山區文化里頂湖一街53號 (NO. 53, TIN HU 1ST STREET, WEN HUA VILLAGE, KUEI SHAN DISTRICT, TAOYUAN CITY, TAIWAN, R. O. C.)

以下測試樣品係由申請廠商所提供及確認 (The following sample(s) was/were submitted and identified by the applicant as)：

送樣廠商(Sample Submitted By)	:	寶燕彩藝股份有限公司 (PAO YAN TSAE YIH CO., LTD.)
樣品名稱(Sample Name)	:	D/S RELEASE PAPER (離型紙)
樣品型號(Style/Item No.)	:	白牛離型、彩格離型、白格離型、彩牛離型、牛皮底離型、牛皮離型、白牛底離、離型膜、白銅離型紙

==========

收件日(Sample Receiving Date)	:	03-Jun-2025
測試期間(Testing Period)	:	03-Jun-2025 to 10-Jun-2025

測試需求(Test Requested) : 依據客戶要求進行測試，測試項目請參閱測試結果表格。 (Testing item(s) is/are specified by client. Please refer to result table for testing item(s).)

測試結果(Test Results) : 請參閱下一頁 (Please refer to following pages.)

Troy Chang / Department Manager
Signed for and on behalf of
SGS TAIWAN LTD.
Chemical Laboratory - Taipei

PIN CODE: F38CB104

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測試報告
Test Report

寶燕彩藝股份有限公司 (PAO YAN TSAE YIH CO., LTD.)
桃園市龜山區文化里頂湖一街53號 (NO. 53, TIN HU 1ST STREET, WEN HUA VILLAGE, KUEI SHAN DISTRICT, TAOYUAN CITY, TAIWAN, R. O. C.)

測試部位敘述 (Test Part Description)

No.1 : 整體混測 (MIXED ALL PARTS)

測試結果 (Test Results)

測試項目 (Test Items)	測試方法 (Method)	單位 (Unit)	MDL	結果 (Result)
				No.1
鎘 (Cd) (Cadmium (Cd))	參考IEC 62321-5: 2013，以感應耦合電漿發射光譜儀分析。(With reference to IEC 62321-5: 2013, analysis was performed by ICP-OES.)	mg/kg	2	n.d.
鉛 (Pb) (Lead (Pb))		mg/kg	2	n.d.
汞 (Hg) (Mercury (Hg))	參考IEC 62321-4: 2013+ AMD1: 2017，以感應耦合電漿發射光譜儀分析。(With reference to IEC 62321-4: 2013+ AMD1: 2017, analysis was performed by ICP-OES.)	mg/kg	2	n.d.
六價鉻 Cr(VI) (Hexavalent Chromium Cr(VI))	參考IEC 62321-7-2: 2017，以紫外光-可見光分光光度計分析。(With reference to IEC 62321-7-2: 2017, analysis was performed by UV-VIS.)	mg/kg	8	n.d.
一溴聯苯 (Monobromobiphenyl)	參考IEC 62321-6: 2015，以氣相層析儀/質譜儀分析。(With reference to IEC 62321-6: 2015, analysis was performed by GC/MS.)	mg/kg	5	n.d.
二溴聯苯 (Dibromobiphenyl)		mg/kg	5	n.d.
三溴聯苯 (Tribromobiphenyl)		mg/kg	5	n.d.
四溴聯苯 (Tetrabromobiphenyl)		mg/kg	5	n.d.
五溴聯苯 (Pentabromobiphenyl)		mg/kg	5	n.d.
六溴聯苯 (Hexabromobiphenyl)		mg/kg	5	n.d.
七溴聯苯 (Heptabromobiphenyl)		mg/kg	5	n.d.
八溴聯苯 (Octabromobiphenyl)		mg/kg	5	n.d.
九溴聯苯 (Nonabromobiphenyl)		mg/kg	5	n.d.
十溴聯苯 (Decabromobiphenyl)		mg/kg	5	n.d.
多溴聯苯總和 (Sum of PBBs)		mg/kg	-	n.d.

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寶燕彩藝股份有限公司 (PAO YAN TSAE YIH CO., LTD.)
桃園市龜山區文化里頂湖一街53號 (NO. 53, TIN HU 1ST STREET, WEN HUA VILLAGE, KUEI SHAN DISTRICT, TAOYUAN CITY, TAIWAN, R. O. C.)

測試項目 (Test Items)	測試方法 (Method)	單位 (Unit)	MDL	結果 (Result)
				No.1
一溴聯苯醚 (Monobromodiphenyl ether)	參考IEC 62321-6: 2015，以氣相層析儀/質譜儀分析。(With reference to IEC 62321-6: 2015, analysis was performed by GC/MS.)	mg/kg	5	n.d.
二溴聯苯醚 (Dibromodiphenyl ether)		mg/kg	5	n.d.
三溴聯苯醚 (Tribromodiphenyl ether)		mg/kg	5	n.d.
四溴聯苯醚 (Tetrabromodiphenyl ether)		mg/kg	5	n.d.
五溴聯苯醚 (Pentabromodiphenyl ether)		mg/kg	5	n.d.
六溴聯苯醚 (Hexabromodiphenyl ether)		mg/kg	5	n.d.
七溴聯苯醚 (Heptabromodiphenyl ether)		mg/kg	5	n.d.
八溴聯苯醚 (Octabromodiphenyl ether)		mg/kg	5	n.d.
九溴聯苯醚 (Nonabromodiphenyl ether)		mg/kg	5	n.d.
十溴聯苯醚 (Decabromodiphenyl ether)		mg/kg	5	n.d.
多溴聯苯醚總和 (Sum of PBDEs)		mg/kg	-	n.d.
鄰苯二甲酸丁苯甲酯 (BBP) (Butyl benzyl phthalate (BBP))	參考IEC 62321-8: 2017，以氣相層析儀/質譜儀分析。(With reference to IEC 62321-8: 2017, analysis was performed by GC/MS.)	mg/kg	50	n.d.
鄰苯二甲酸二丁酯 (DBP) (Dibutyl phthalate (DBP))		mg/kg	50	n.d.
鄰苯二甲酸二(2-乙基己基)酯 (DEHP) (Di-(2-ethylhexyl) phthalate (DEHP))		mg/kg	50	n.d.
鄰苯二甲酸二異丁酯 (DIBP) (Diisobutyl phthalate (DIBP))		mg/kg	50	n.d.
鄰苯二甲酸二異癸酯 (DIDP) (Diisodecyl phthalate (DIDP)) (CAS No.: 26761-40-0, 68515-49-1)		mg/kg	50	n.d.
鄰苯二甲酸二異壬酯 (DINP) (Diisononyl phthalate (DINP)) (CAS No.: 28553-12-0, 68515-48-0)		mg/kg	50	n.d.
鄰苯二甲酸二正辛酯 (DNOP) (Di-n-octyl phthalate (DNOP)) (CAS No.: 117-84-0)		mg/kg	50	n.d.

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測試報告
Test Report

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桃園市龜山區文化里頂湖一街53號 (NO. 53, TIN HU 1ST STREET, WEN HUA VILLAGE, KUEI SHAN DISTRICT, TAOYUAN CITY, TAIWAN, R. O. C.)

測試項目 (Test Items)	測試方法 (Method)	單位 (Unit)	MDL	結果 (Result)
				No.1
氟 (F) (Fluorine (F)) (CAS No.: 14762-94-8)	參考BS EN 14582: 2016，以離子層析儀分析。 (With reference to BS EN 14582: 2016, analysis was performed by IC.)	mg/kg	50	n.d.
氯 (Cl) (Chlorine (Cl)) (CAS No.: 22537-15-1)		mg/kg	50	216
溴 (Br) (Bromine (Br)) (CAS No.: 10097-32-2)		mg/kg	50	n.d.
碘 (I) (Iodine (I)) (CAS No.: 14362-44-8)		mg/kg	50	n.d.

備註(Note)：

1. mg/kg = ppm；0.1wt% = 0.1% = 1000ppm
2. MDL = Method Detection Limit (方法偵測極限值)
3. n.d. = Not Detected (未檢出)；小於MDL / Less than MDL
4. "-" = Not Regulated (無規格值)
5. 樣品的測試是基於申請人要求混合測試，報告中的混合測試結果不代表其中個別單一材質的含量。
   The sample(s) was/were analyzed on behalf of the applicant as mixing sample in one testing. The above result(s) was/were only given as the informality value.

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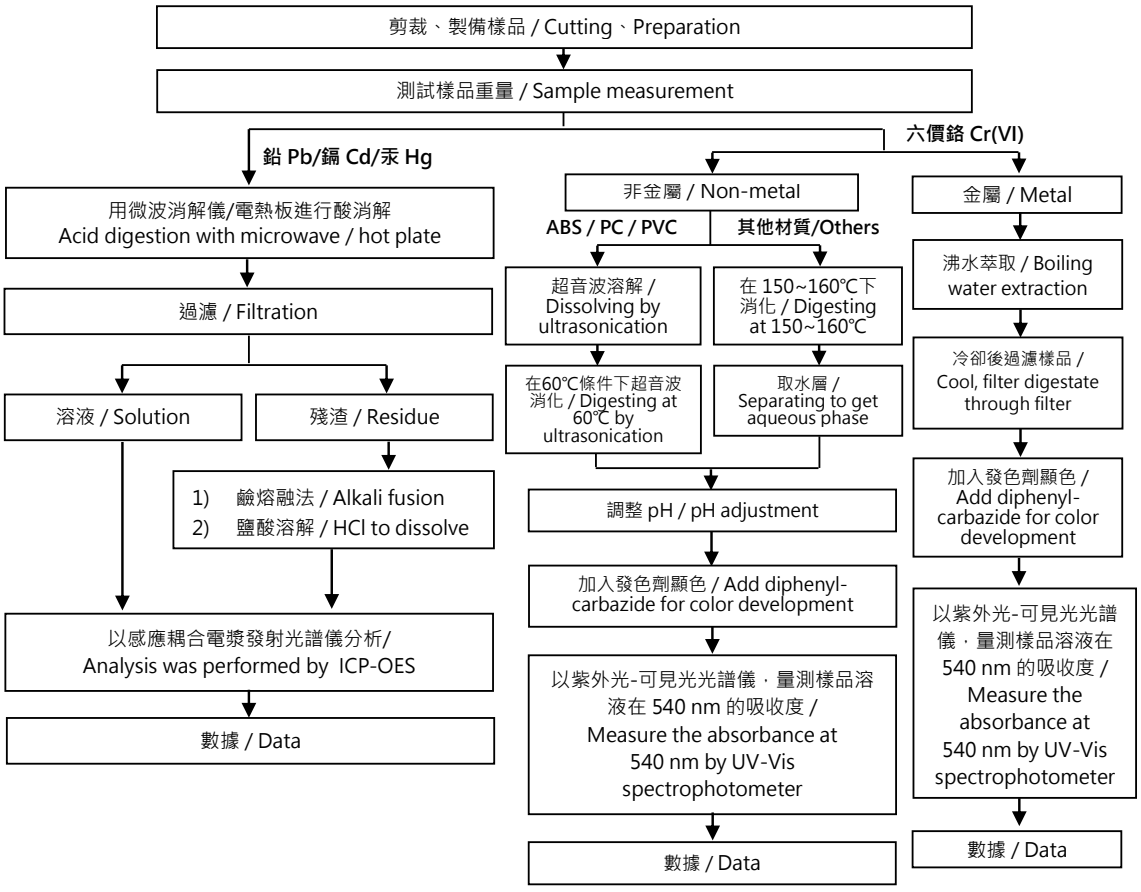
重金屬流程圖 / Analytical flow chart of heavy metal

根據以下的流程圖之條件，樣品已完全溶解。（六價鉻測試方法除外）

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

（Cr^{6+} test method excluded）



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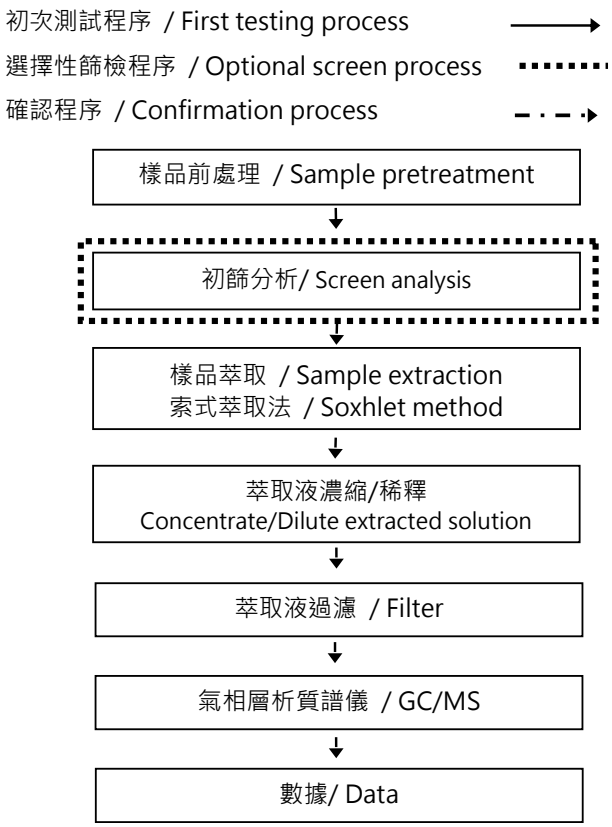
多溴聯苯/多溴聯苯醚分析流程圖 / Analytical flow chart - PBBs/PBDEs



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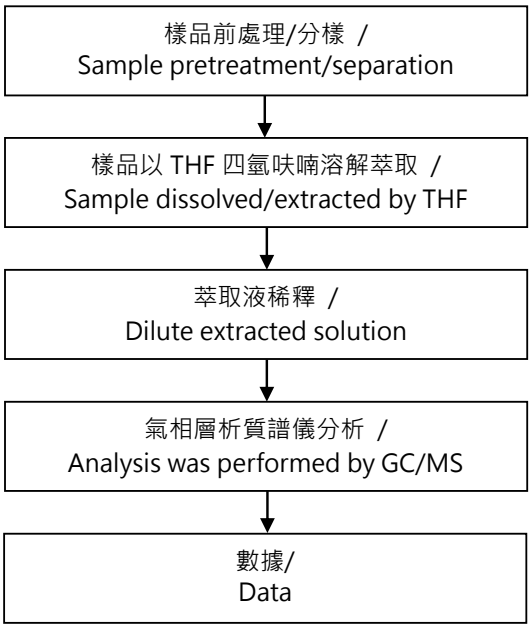
可塑劑分析流程圖 / Analytical flow chart - Phthalate

【測試方法/Test method: IEC 62321-8】



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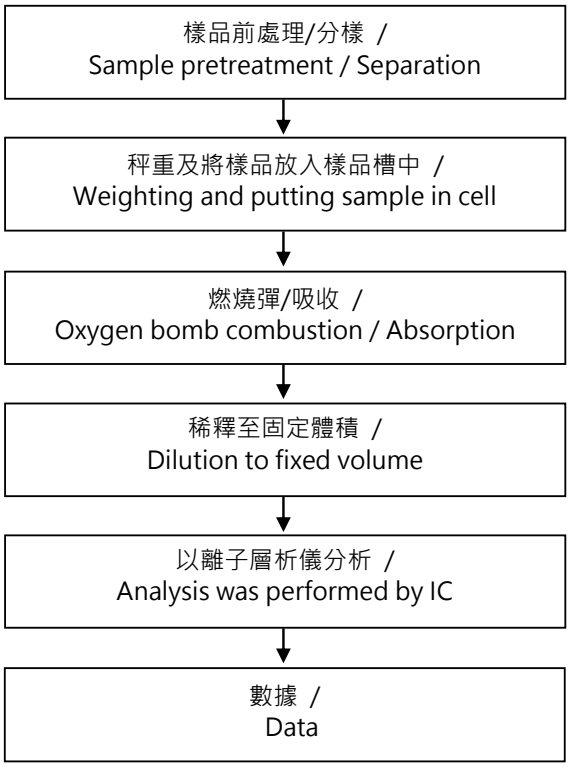
鹵素分析流程圖 / Analytical flow chart - Halogen



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*** 照片中如有箭頭標示，則表示為實際檢測之樣品/部位. ***
(The tested sample / part is marked by an arrow if it's shown on the photo.)

ETR25600070



** 報告結尾 (End of Report) **

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Regulatory Data Sheet

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This Regulatory Data Sheet is provided as a courtesy in response to a customer request.

3M™ VHB™ Tape 5915, 5915F

3M
Industrial Adhesives and Tapes Division
3M Center, St. Paul, MN 55144-1000, USA
1-888-3M HELPS (1-888-364-3577)

RDSs are available at www.3M.com

Regulations and Industry Standards

SDS (US OSHA)
This product is an article and therefore is not subject to the requirements of the US Occupational Safety and Health Administration's (OSHA) Hazardous Communications Standard 29 CFR 1910.1200(b)(6)(v) to provide a Safety Data Sheet (SDS).
China RoHS
This product or part does not exceed the maximum concentration values (MCVs) in China RoHS GB/T 26572-2011/AMD No. 1 (Requirements of Concentration limits for certain restricted substances in electrical and electronic products), which means that each of the homogeneous materials within this product is below the following MCVs: (a) 0.1% (by weight) for lead and its compounds, mercury and its compounds, hexavalent chromium and its compounds, polybrominated biphenyls, polybrominated diphenyl ethers, di(2-ethylhexyl) phthalate, butyl benzyl phthalate, dibutyl phthalate, or diisobutyl phthalate; and (b) 0.01% (by weight) for cadmium and its compounds.
CONEG
This product complies with the US CONEG (Coalition of Northeastern Governors) Model Toxics in Packaging Legislation as there is no intentionally added lead, cadmium, hexavalent chromium or mercury, and the sum total concentration of these substances in the product does not exceed 100 ppm by weight.
Conflict Minerals
Conflict Minerals, which the U.S. Securities and Exchange Commission ("SEC") has defined as gold, columbite-tantalite (coltan), cassiterite, wolframite, or their derivatives (tin, tantalum, or tungsten), are not contained in or are not "necessary to the functionality or necessary to the production" of the above-listed product, as the term "necessary to the functionality or the production" is defined under the SEC's Conflict Minerals Rule. 77 Fed. Reg. 56274 (Sept. 12, 2012).
EU REACH
Substances listed in Annex XIV of Regulation No 1907/2006 of the European Parliament and the Council concerning the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH) are not intentionally added to this product.
EU REACH
This product, including any article that the product is composed of, does not contain at greater than 0.1% by weight a

Substance of Very High Concern (SVHC) substance identified according to Article 59 of REACH. This declaration reflects the substances on the candidate SVHC list, effective June 2025.

EU REACH

This product or part is known to contain a substance listed in Annex XVII. *For more information on downstream conditions of use for the product as sold, consult the following Entries: 3, 75.*

EU RoHS

This product does not exceed the maximum concentration values (MCVs) set under EU Directive 2011/65/EU (RoHS recast/RoHS 2), as stated in Annex II to that directive. This means that each of the homogenous materials within this product does not exceed the following MCVs: (a) 0.1% (by weight) for lead, mercury, hexavalent chromium, polybrominated biphenyls or polybrominated diphenyl ethers; and (b) 0.01% (by weight) for cadmium.

EU RoHS Phthalates

This product does not exceed the maximum concentration values (MCVs) for phthalates set under EU Directive 2011/65/EU (RoHS recast/RoHS 2), as amended by EU 2015/863, which applies to finished EEE after July 22, 2019 for Category 1-7, 10-11 products and after July 22, 2021 for Category 8 and 9 products. This means that each of the homogeneous materials within this product does not exceed the MCV of 0.1% (by weight) for each of the following phthalates: DEHP, BBP, DBP, and DIBP.

GADSL

This product contains a Declarable or Prohibited substance(s) that is present at or above the reportable threshold levels in the Global Automotive Declarable Substance List (GADSL). This declaration reflects the substances on the list as of the date of this certificate. *5915 VHB is available in the public domain of IMDS with Material Module ID 143026085.*

Halal

This product has not been certified Halal.

Halogens – IEC 61249-2-21

This product meets the non-halogenated permissible limits of the International Electrotechnical Commission (IEC) 61249-2-21 standard as having less than 900 ppm bromine, less than 900 ppm chlorine, and less than 1500 ppm total bromine and chlorine.

Kosher

This product has not been certified Kosher.

Stockholm Agreement

This product does not contain Persistent Organic Pollutants (POPs) at or above applicable thresholds per Annexes A, B, and C of the Stockholm Convention, May 2004 and subsequent amendments.

Sustainability Advantage: Recycled content

This product does not contain recycled content.

TSCA Section 6

This product is not known to contain 2,4,6-Tri-tert-butylphenol (CAS 732-26-3).

TSCA Section 6

This product is not known to contain Decabromodiphenyl Ether (Deca-BDE) (CAS 1163-19-5).

TSCA Section 6

This product is not known to contain Hexachlorobutadiene (HCBD) (CAS 87-68-3).

TSCA Section 6

This product is not known to contain Pentachlorothiophenol (PCTP) (CAS 133-49-3).

TSCA Section 6

This product is not known to contain Phenol, isopropylated phosphate (3:1) (PIP (3:1)) (CAS 68937-41-7).

Chemicals and/or Compounds of Interest

Asbestos : Not known to contain.

Biocides/Preservatives : Biocides/preservatives are not intentionally added for the purpose of protecting the product from the growth of microorganisms.

Bisphenol A (BPA) (CAS 80-05-7) : Not known to contain.

Cobalt and (Co) Compounds : Not known to contain.

Gallium (CAS 7440-55-3) : Not known to contain.

Germanium (CAS 7440-56-4) : Not known to contain.

Materials of Human or Animal Origin : Contains. *Not reviewed for health care applications involving patient contact, or for applications involving food.*

Medium-chained chlorinated paraffins, C14-C17 (MCCP) : Not known to contain.
Mica : Not known to contain.
Natural Rubber Latex : Not known to contain.
Ozone Depleting Chemicals (ODCs) : Not known to contain.
Pentachlorophenol (87-86-5) : Not known to contain.
Polycyclic Aromatic Hydrocarbons (PAHs) : Not known to contain.
Rare Earth Elements (REE) or Rare Earth Metals (REM) : Not known to contain.

Per- and Polyfluoroalkyl Substances (PFAS)

PFAS refers to a broad range of thousands of materials with varying properties and characteristics, which may include high resistance to oil, water, temperature, chemicals, and fire, which makes certain PFAS critical to the functioning of many modern products.

Per- and polyfluoroalkyl substances (PFAS) : Not intentionally added.
Perfluorohexane sulfonate (PFHxS) : Not intentionally added.
Perfluorohexanoic acid (PFHxA) (CAS 307-24-4) : Not intentionally added.
Perfluorooctanesulfonic Acid (PFOS) (CAS 1763-23-1) : Not intentionally added.
Perfluorooctanoic Acid (PFOA) (CAS 335-67-1) : Not intentionally added.

Definitions

Note: all Definitions take Disclaimers into account and apply to the "Chemicals and/or Compounds of Interest" and/or "Per and poly-fluoroalkyl Substances (PFAS)" sections only

**Terms apply to the Chemicals and/or Compounds of Interest Section only (if section is present)*
***Terms apply to the PFAS Section only (if section is present)*
****Terms apply to both the Chemicals and/or Compounds of Interest and PFAS Sections (if section(s) are present)*

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of said Product to 3M. 3M shall not under any circumstances be liable for direct, incidental, special, or consequential damages (including but not limited to loss of profits, revenue, or business) related to or arising out of this certification, including, the use, misuse or inability to use the Product. Unless stated otherwise in writing, the foregoing language cannot be waived, modified, or supplemented in any manner whatsoever.

REACH SVHC 聲明書

Declaration Statement

本公司聲明其所交予俐元企業股份有限公司之產品，符合歐盟EU REACH 法規SVHC高度關注物質，最新公告日期 2025年06月25日累積共250 項物質。

Our company hereby declares that the products delivered to **LI YUN ENTERPRISE CO., LTD.** comply with the **EU REACH Regulation regarding SVHC (Substances of Very High Concern)**, in accordance with the latest candidate list updated on **June 25, 2025**, currently comprising **250 substances** in total.

網址： http://echa.europa.eu/web/guest/candidate-list-table

產品名稱/型號Product Name：白格單離 70gsm (#13)

■ **沒有使用 SVHC 高關注物質。**

□ **有使用SVHC 高關注物質，請完成下表填寫：**

Substance Name 物質名稱	CAS No	Percent by weight % (含量值)	Production Plant (生產地)	Main Purposes (主要用途說明)

公司名稱Company Name:：寶燕彩藝股份有限公司

負 責 人Responsible Person:：黃守謙

職務名稱Title:：品管經理

聯絡電話Contact Number:：03-3282896 #170

日期Date:：2025/08/08

公司印章Company Seal:：

