



# 东莞市一佳电子通讯科技有限公司

Dongguan YiJia Electronics Communication Technology Co.,Ltd.

## SPECIFICATION FOR APPROVAL

|                |            |
|----------------|------------|
| 日期<br>Date     | 2022/12/05 |
| 编号<br>File No  | 22120502   |
| 版本<br>Revision | 1.0        |

CUSTOMER: AUTEL

CUSTOMER NO: DV2232(501011382)

PART NAME: 2.4/5.8G Antenna

SUPPLIER NO: YJI01.005.072.301A

Date:

Q “TY:

| CUSTOMER APPROVED BY |       |            |
|----------------------|-------|------------|
| APPROVAL             | CHIEF | SUPERVISOR |
|                      |       |            |

| SUPPLIER SIGNATURE                                                                                  |       |            |
|-----------------------------------------------------------------------------------------------------|-------|------------|
| APPROVAL                                                                                            | CHECK | DESIGN     |
| <br>ChenGuoqiang | XieLi | ChenXingyi |

YJ-RD-F04-A

add: 东莞市长安镇沙头社区木鱼路59号元富工业区 Tel:0769-82586086 Fax:0769-82586086



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| 10      | RoHS报告 (RoHS Test Report)    | **                         | **                    |
| 11      | N/A                          | N/A                        | N/A                   |
| 12      | -                            | -                          | -                     |
| 13      | -                            | -                          | -                     |

RoHS  
Compatible

CUSTOMER  
PART NO

REV.

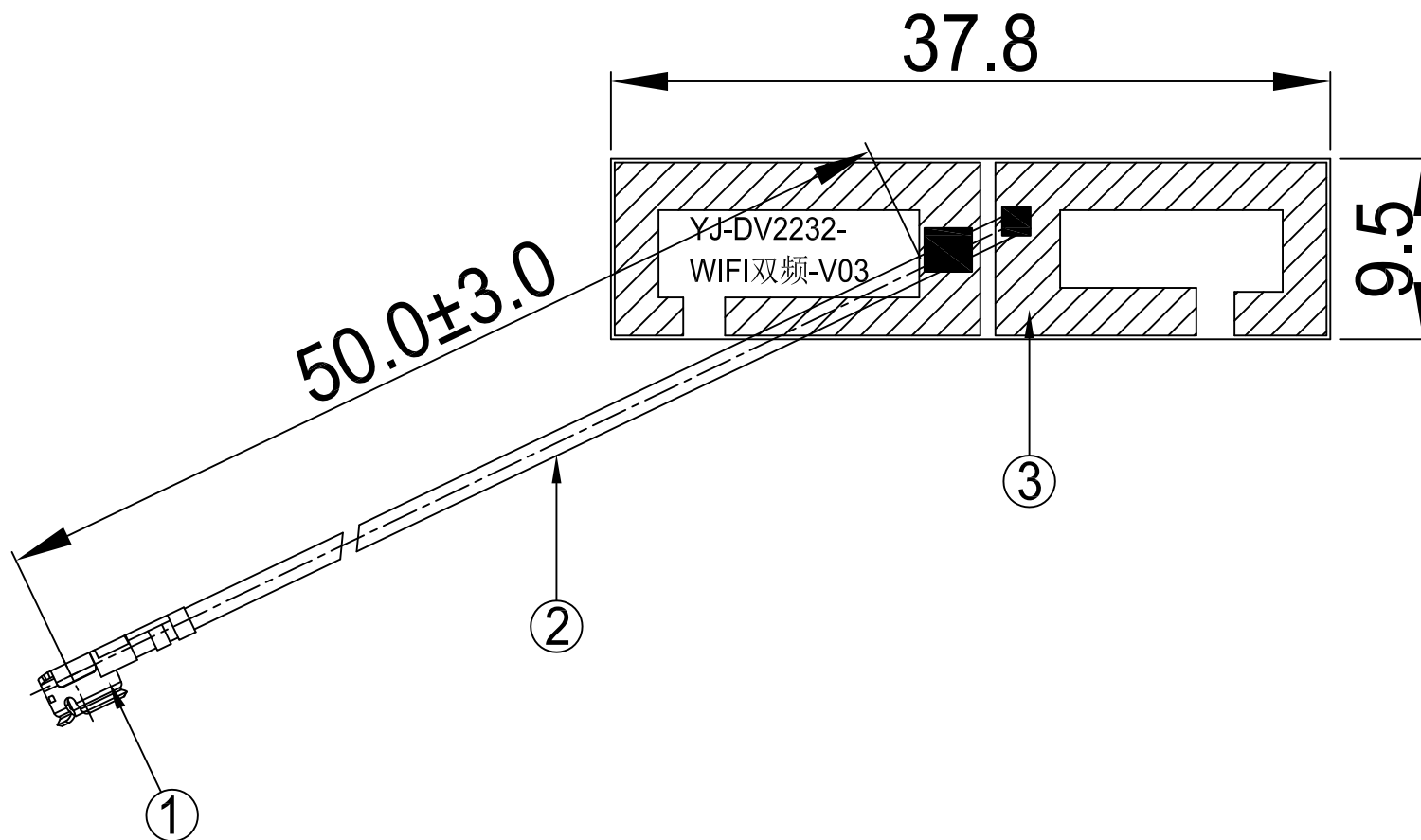


DESCRIPTION

首次发行

DATE

2022-11-23



|    |                |                |          |               |      |
|----|----------------|----------------|----------|---------------|------|
| 3  | FPCB           | 37.8*9.5MM     | FPCB     | FPC1000XA.P01 | 1    |
| 2  | Coaxial Cable  | O.D.1.13 Black | O.D.1.13 | COA1000XA.P01 | 1    |
| 1  | Mini Connector | Au Plated 1代   | Cu       | TER1000XA.P01 | 1    |
| NO | PART NAME      | DESCRIPTION    | Material | Part Number   | Q.TY |



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Dongguan YiJia Electronics Communication Technology Co.,Ltd. Tel.:0769-82586086 Fax:0769-82586086

PART NAME: 2.4/5.8G Antenna

PART NO.: YJI01.005.072.301A

DATE: 2022-11-23

APPROVED BY

CHECKED BY

DESIGNED BY



Tolerance

殷涛

喻亚锋

吕森桦

UNITS: mm

X.X ±0.50

SCALE: 1/1

X.XX±0.15

REVISION: A

X° ±3°



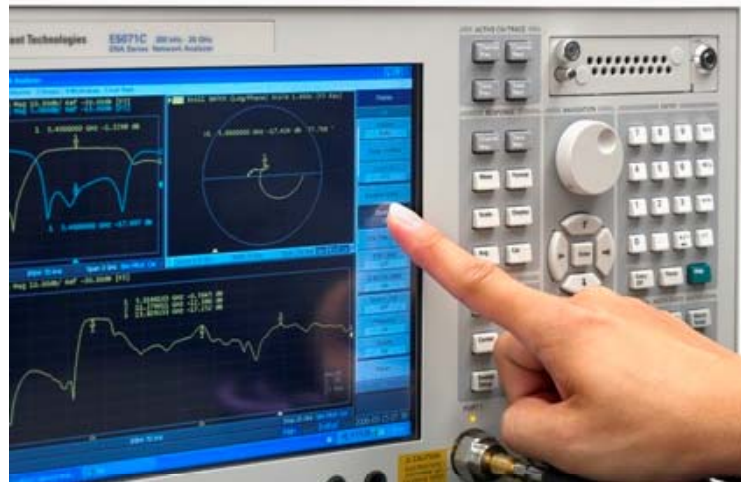
# 天线规格

## Antenna Specification

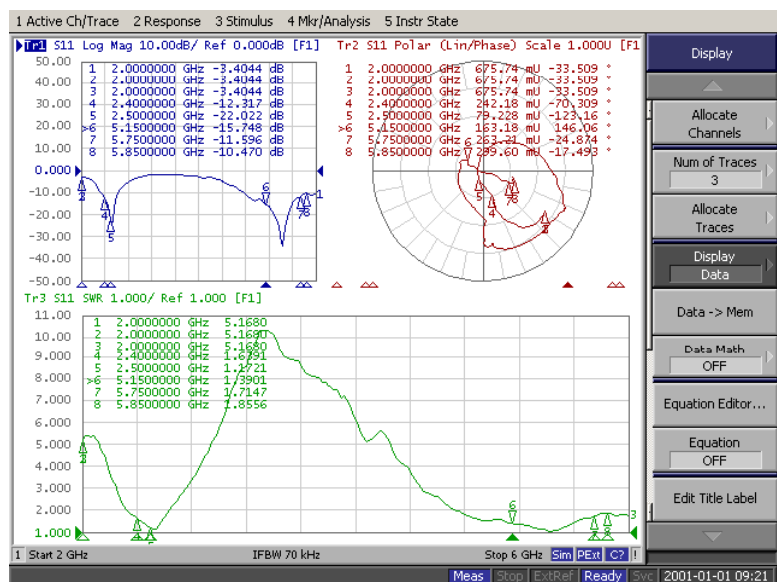
| Electrical Properties   |                                            |
|-------------------------|--------------------------------------------|
| Frequency               | 2.4-2.5GHz<br>5.15-5.85GHz                 |
| Impedance               | 50 Ohm Nominal                             |
| V.S.W.R                 | 2.0 Max                                    |
| Gain                    | 4.4 dBi@2.4-2.5GHz<br>3.1 dBi@5.15-5.85GHz |
| Radiation               | Omni-directional                           |
| Polarization            | Linear                                     |
| Physical Properties     |                                            |
| Connector               | 1代IPEX                                     |
| Cable Type              | O.D.1.13mm                                 |
| Cable Length            | 50mm                                       |
| Cable Color             | Black                                      |
| Operating Temp.         | -40 ~ +85 °C                               |
| Storage Temp / Humidity | 25±5°C / <70%                              |

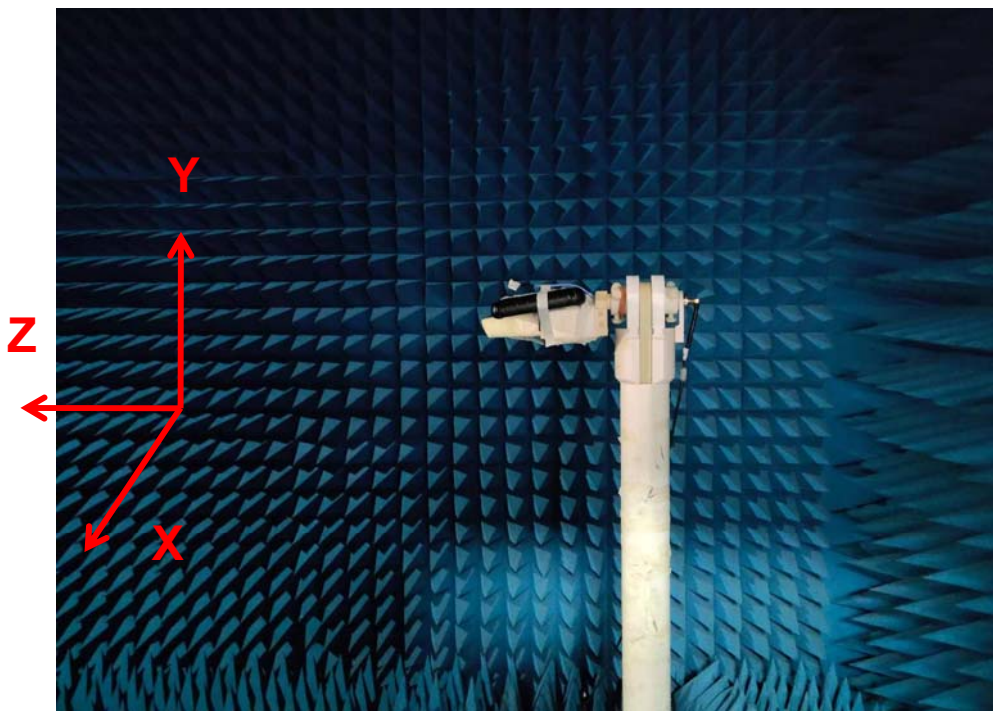
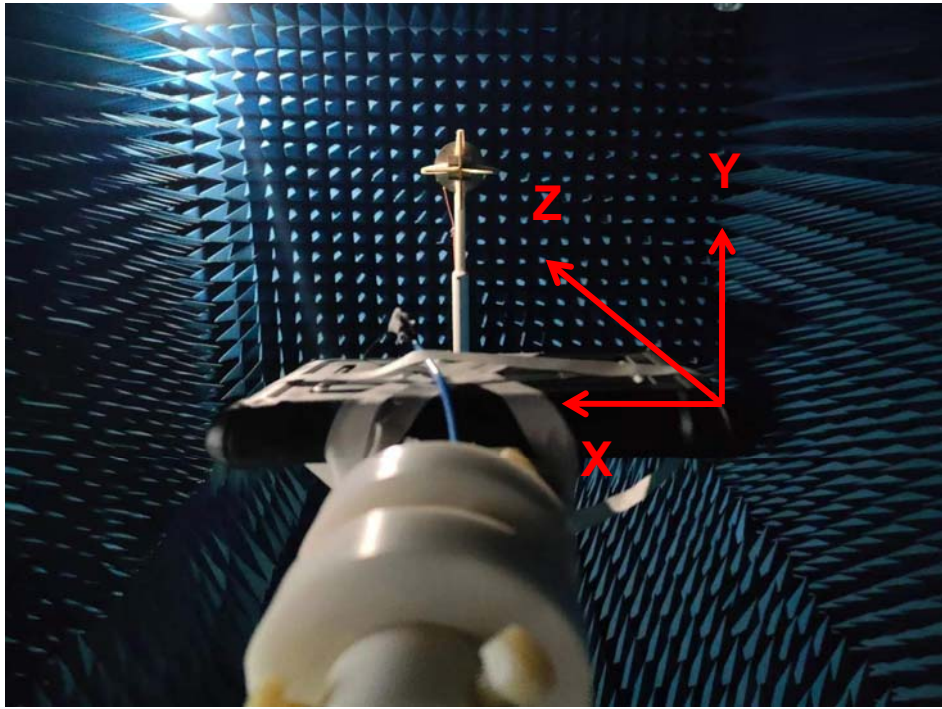


## Agilent E5071B



## S Parameter Test // WIFI Antenna







### Passive Test For WiFi2.4G

| Freq<br>(MHz) | Effi<br>(%) | Effi<br>(dB) | Gain<br>(dBi) |
|---------------|-------------|--------------|---------------|
| 2400          | 60.3        | -2.2         | 3.5           |
| 2410          | 59.1        | -2.3         | 3.7           |
| 2420          | 58.0        | -2.4         | 3.7           |
| 2430          | 55.6        | -2.6         | 3.7           |
| 2440          | 54.3        | -2.7         | 3.7           |
| 2450          | 58.0        | -2.4         | 4.1           |
| 2460          | 57.8        | -2.4         | 4.0           |
| 2470          | 58.6        | -2.3         | 4.1           |
| 2480          | 57.0        | -2.4         | 4.0           |
| 2490          | 58.0        | -2.4         | 4.2           |
| 2500          | 59.8        | -2.2         | 4.4           |



## Passive Test For WiFi5.8G

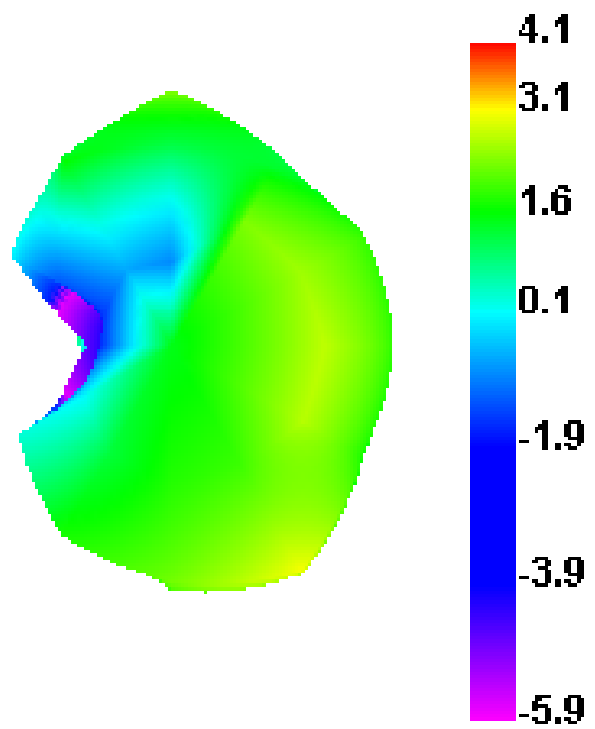
| Freq<br>(MHz) | Effi<br>(%) | Effi<br>(dB) | Gain<br>(dBi) |
|---------------|-------------|--------------|---------------|
| 5150          | 44.7        | -3.5         | 0.4           |
| 5200          | 54.2        | -2.7         | 1.3           |
| 5250          | 58.2        | -2.4         | 1.6           |
| 5300          | 62.5        | -2.0         | 1.8           |
| 5350          | 59.6        | -2.3         | 1.6           |
| 5400          | 57.1        | -2.4         | 1.2           |
| 5450          | 55.6        | -2.6         | 1.1           |
| 5500          | 54.9        | -2.6         | 1.4           |
| 5550          | 50.2        | -3.0         | 1.2           |
| 5600          | 50.6        | -3.0         | 1.5           |
| 5650          | 68.3        | -1.7         | 3.1           |
| 5700          | 62.4        | -2.1         | 2.7           |
| 5750          | 59.9        | -2.2         | 2.3           |
| 5800          | 51.3        | -2.9         | 1.2           |
| 5850          | 47.5        | -3.2         | 0.9           |





## Radiation Pattern For WIFI Antenna

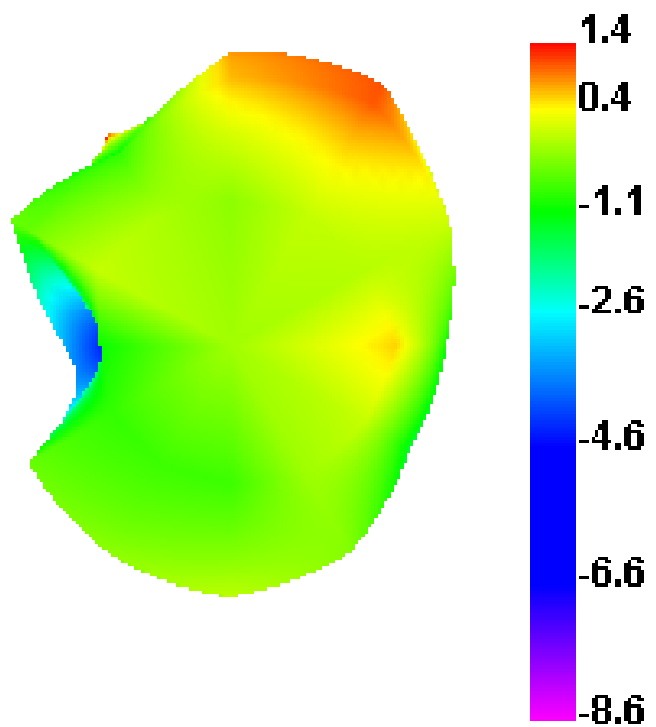
**2450.000MHz**





## Radiation Pattern For WIFI Antenna

**5500.000MHz**





*Device*



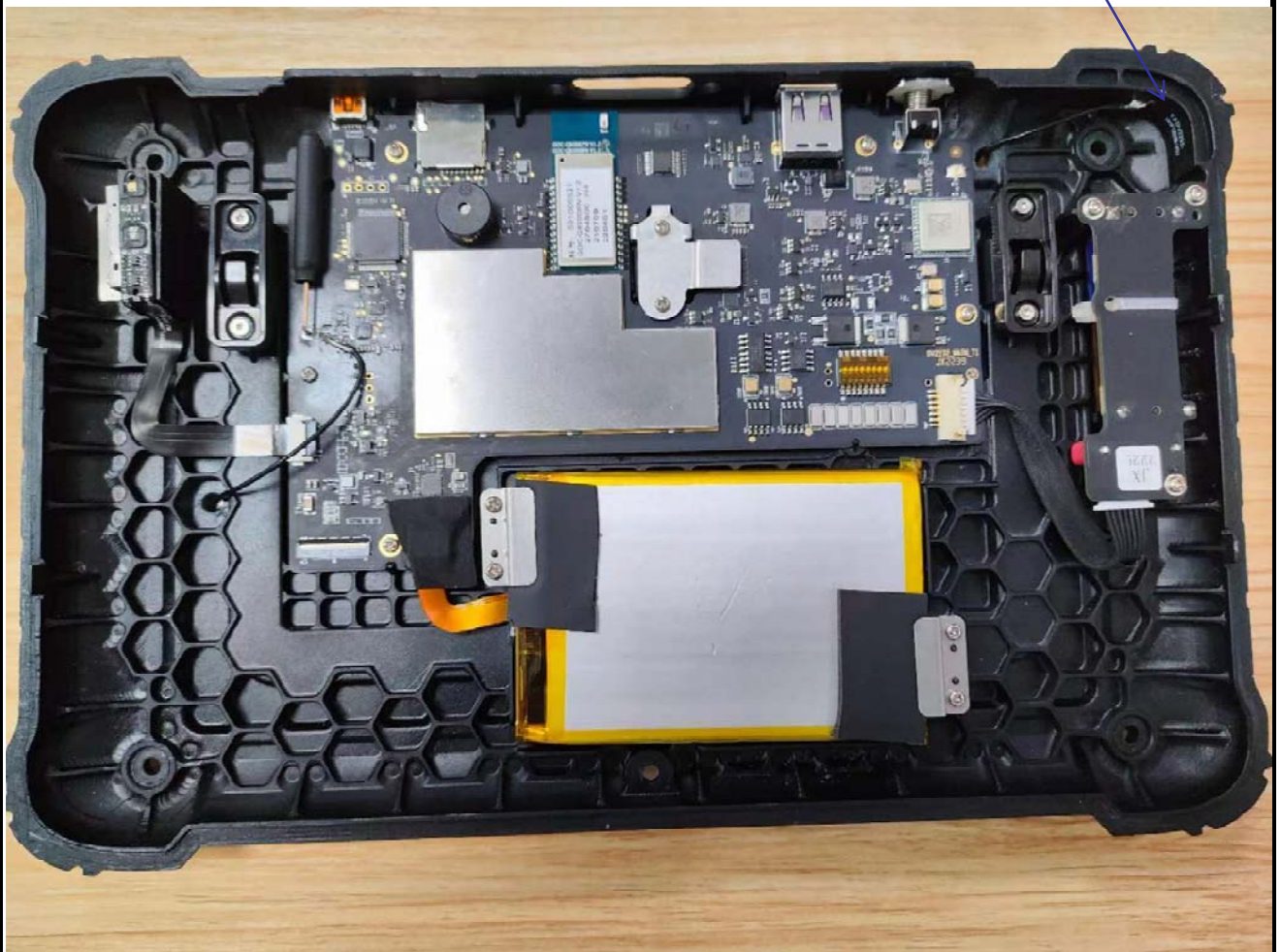


## ***WIFI Antenna***





WiFi ANT



## ，一、化學品與廠商資料

|                                                                           |
|---------------------------------------------------------------------------|
| 化學品名稱：液態熱固軟板油墨 PSM-800FSDM-A/SMH-800                                      |
| 其他名稱：                                                                     |
| 建議用途及限制使用：柔性电路板(PI/Cu), 手機天線板                                             |
| 製造者、輸入者或供應者名稱、地址及電話：製造者：優立實業股份有限公司<br>住址：桃園市觀音區經建四路 22 號 電話：886-3-4836651 |
| 緊急聯絡電話/傳真電話：電話：886-3-4836651、傳真：886-3-4837487                             |

## 二、危害辨識資料

|                                                                                                                                                                      |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 化學品危害分類：                                                                                                                                                             |
| 健康及環境危害：急毒性物質（吞食）第 4 級、腐蝕／刺激皮膚物質第 2 級、嚴重損傷／刺激眼睛物質第 2A 級、皮膚過敏物質第 1 級、致癌物質第 2 級、水環境之危害物質（急毒性）第 2 級。                                                                    |
| 標示內容：                                                                                                                                                                |
| 象 徵 符 號：                                                                                                                                                             |
|                                                                                     |
| 警 示 語：警告                                                                                                                                                             |
| 危害警告訊息：                                                                                                                                                              |
| 吞食有害<br>造成皮膚刺激<br>造成嚴重眼睛刺激<br>可能造成皮膚過敏<br>懷疑致癌<br>對水生生物有毒                                                                                                            |
| 危害防範措施：                                                                                                                                                              |
| 置容器於通風良好的地方<br>遠離高溫<br>使用時勿吃、喝<br>衣服一經污染，立即脫掉<br>戴眼罩／護面罩<br>若與眼睛接觸，立刻以大量的水洗滌後洽詢醫療<br>戴上合適的手套<br>勿吸入氣體/煙氣/蒸氣/霧氣<br>使用前取得說明<br>置放於上鎖處<br>在瞭解所有安全防範措施之前切勿處置<br>避免釋放至環境中 |
| 其他危害：—                                                                                                                                                               |

## 三、成份辨識資料

### 混合物：

|                                      |                    |                |
|--------------------------------------|--------------------|----------------|
| 中英文名稱：液態熱固軟板油墨 PSM-800FSDM-A/SMH-800 |                    |                |
| 化學性質：                                |                    |                |
| 危害成分之中英文名稱                           | 化學文摘社登記號碼（CAS No.） | 濃度或濃度範圍(成分百分比) |
| 環氧丙烯酸酯寡聚物 Epoxy acrylate oligmer     | 28064-14-4         | 50 %           |
| 二氧化矽 Fused silica                    | 7631-86-9          | 13 %           |
| 芳香族溶劑 Aromatic solvent               | 64742-94-5         | 4 %            |