



东莞市一佳电子通讯科技有限公司

Dongguan YiJia Electronics Communication Technology Co.,Ltd.

规格承认书

SPECIFICATION FOR APPROVAL

日期 Date	2022/12/05
编号 File No	22120501
版本 Revision	1.0

客户
CUSTOMER:

AUTEL

客户料号
CUSTOMER NO:

DV2231

品名
PART NAME:

2.4/5.8G Antenna

供方料号
SUPPLIER NO:

YJI01.005.074.301A

送样日期Date:

送样数量Q “TY:

客户确认CUSTOMER APPROVED BY		
APPROVAL	CHIEF	SUPERVISOR

供方确认 SUPPLIER SIGNATURE		
APPROVAL	CHECK	DESIGN
 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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11	N/A	N/A	N/A
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13	-	-	-

RoHS
Compatible

CUSTOMER
PART NO

REV.

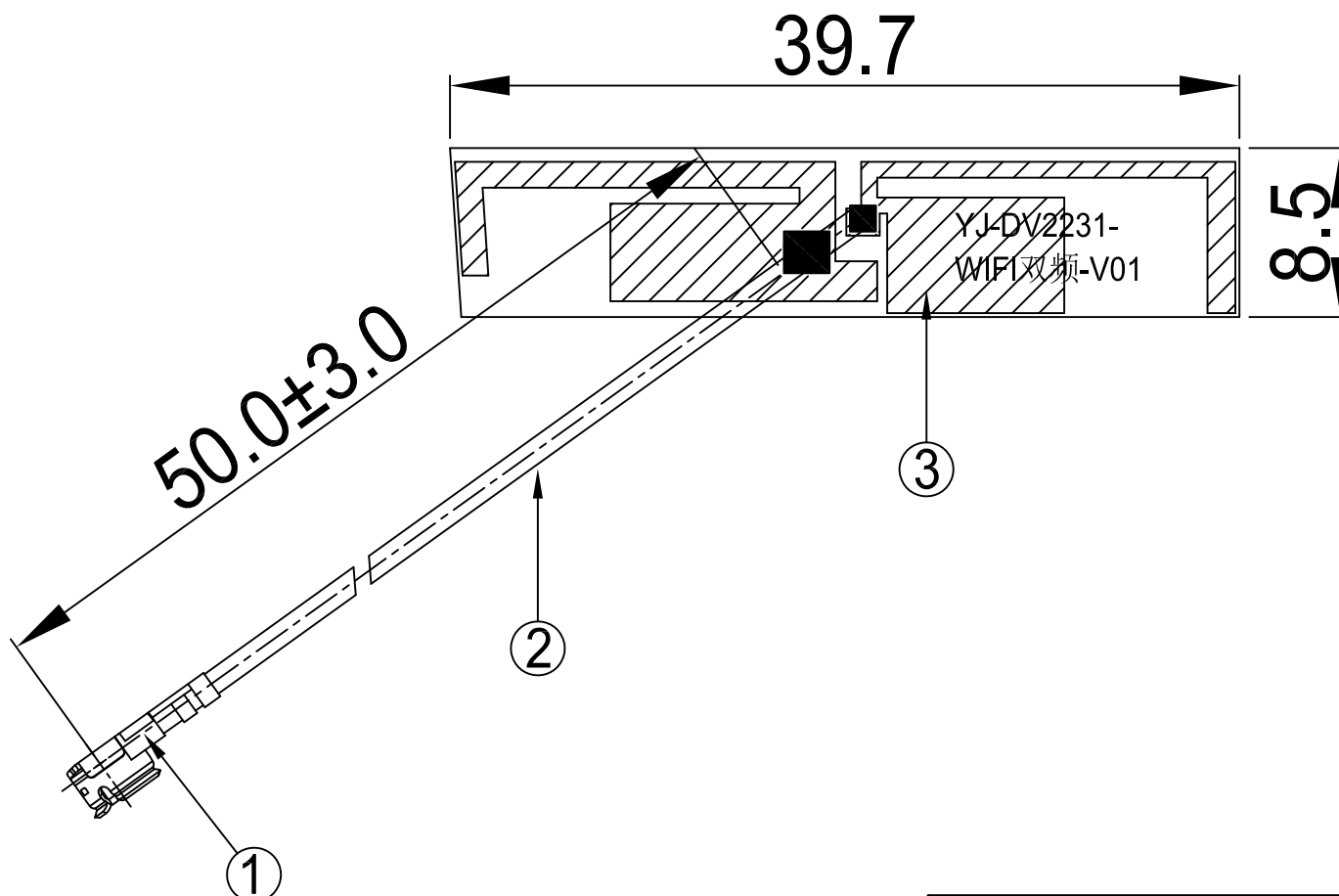


DESCRIPTION

首次发行

DATE

2022-11-23



3	FPCB	39.7*8.5MM	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.: YJI01.005.074.301A

DATE: 2022-11-23

APPROVED BY

CHECKED BY

DESIGNED BY



Tolerance

殷涛

喻亚峰

吕森桦

UNITS: mm

X.X ±0.50

SCALE: 1/1

X.XX±0.15

REVISION: A

X° ±3°



天线规格

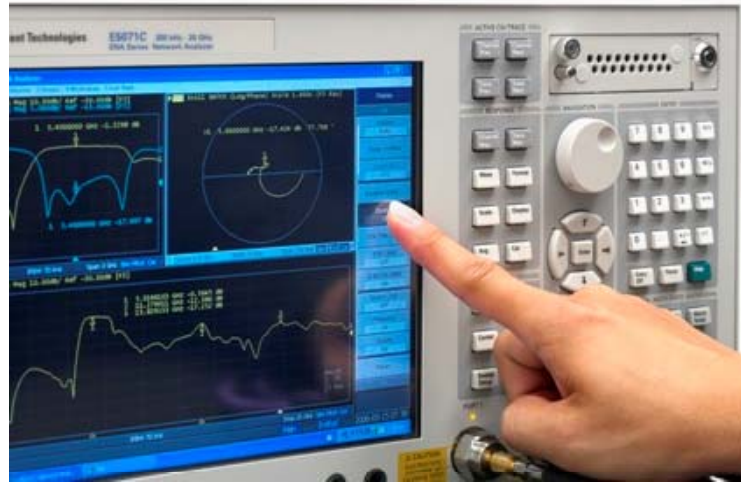
Antenna Specification

Electrical Properties	
Frequency	2.4-2.5GHz 5.15-5.85GHz
Impedance	50 Ohm Nominal
V.S.W.R	2.0 Max
Gain	1.4 dBi@2.4-2.5GHz 3.0 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%

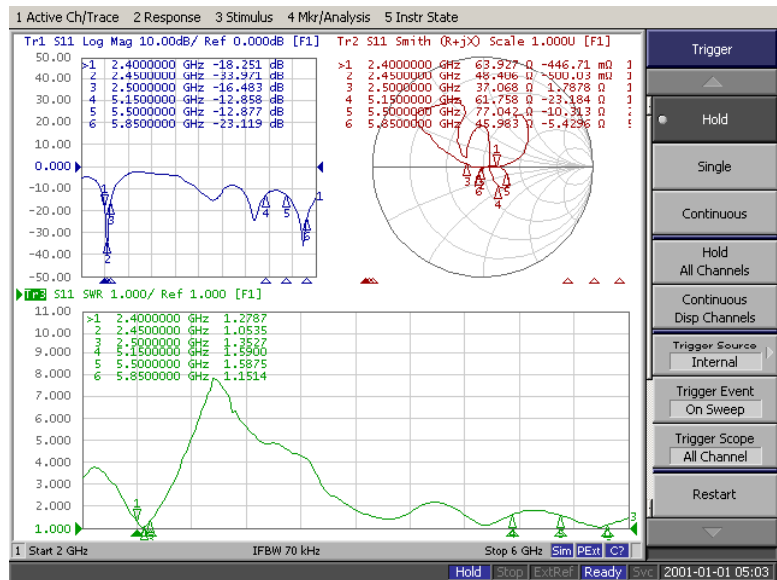
add: 东莞市长安镇沙头社区木鱼路59号元富工业区 Tel:0769-82586086 Fax:0769-82586086

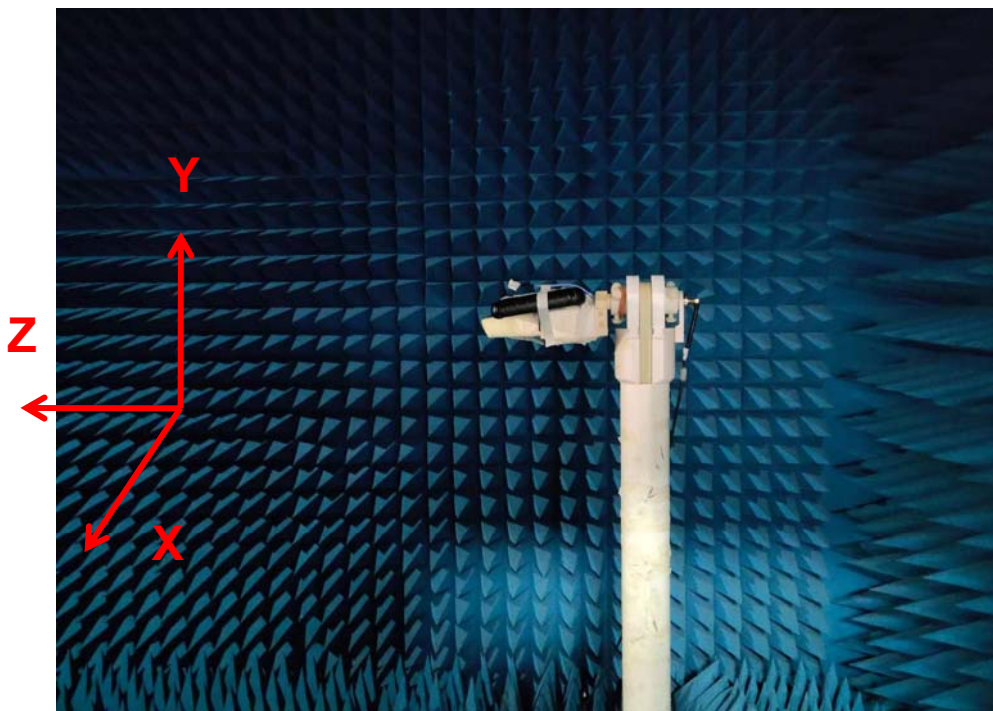
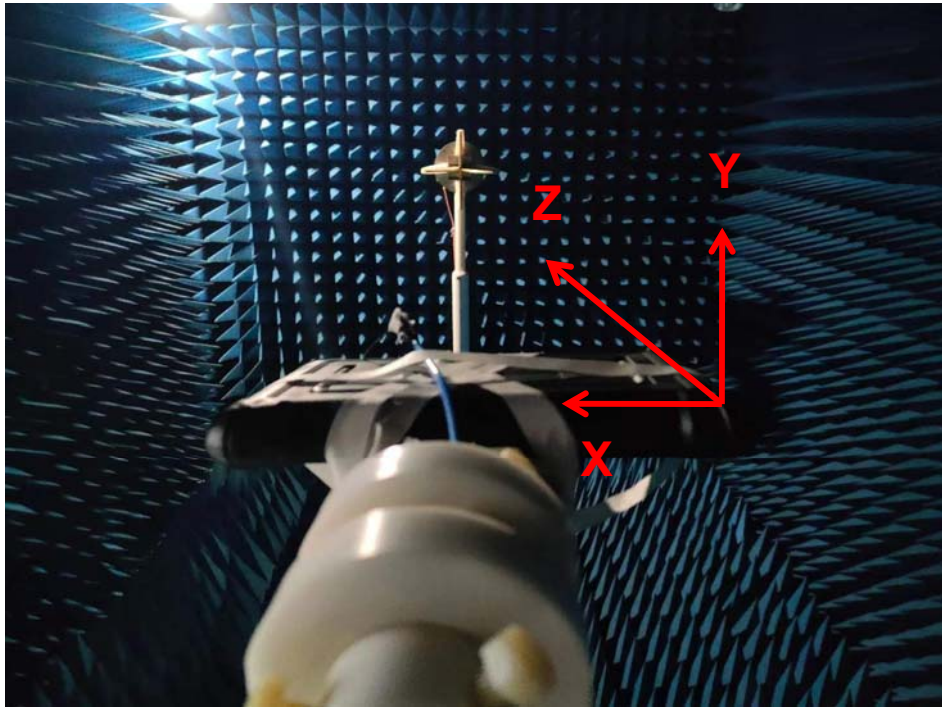


Agilent E5071B



S Parameter Test // WIFI Antenna







Passive Test For WiFi2.4G

Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)
2400	58.9	-2.3	1.0
2410	59.1	-2.3	0.8
2420	58.7	-2.3	0.9
2430	57.1	-2.4	0.9
2440	56.5	-2.5	1.0
2450	60.4	-2.2	1.3
2460	60.3	-2.2	1.4
2470	61.1	-2.1	1.3
2480	59.3	-2.3	1.1
2490	59.5	-2.3	1.1
2500	59.4	-2.3	1.3



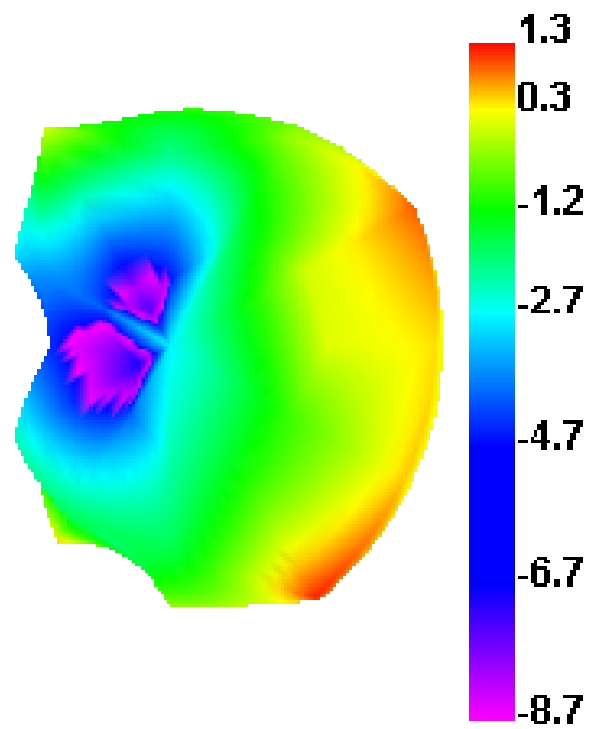
Passive Test For WiFi5.8G

Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)
5150	44.0	-3.6	0.6
5200	47.6	-3.2	0.7
5250	45.7	-3.4	0.2
5300	44.8	-3.5	0.0
5350	45.5	-3.4	0.4
5400	46.8	-3.3	1.0
5450	49.2	-3.1	1.3
5500	50.7	-3.0	1.2
5550	48.9	-3.1	0.9
5600	54.6	-2.6	1.7
5650	76.5	-1.2	3.0
5700	70.7	-1.5	2.3
5750	63.6	-2.0	1.4
5800	52.1	-2.8	0.6
5850	47.7	-3.2	0.7



Radiation Pattern For WIFI Antenna

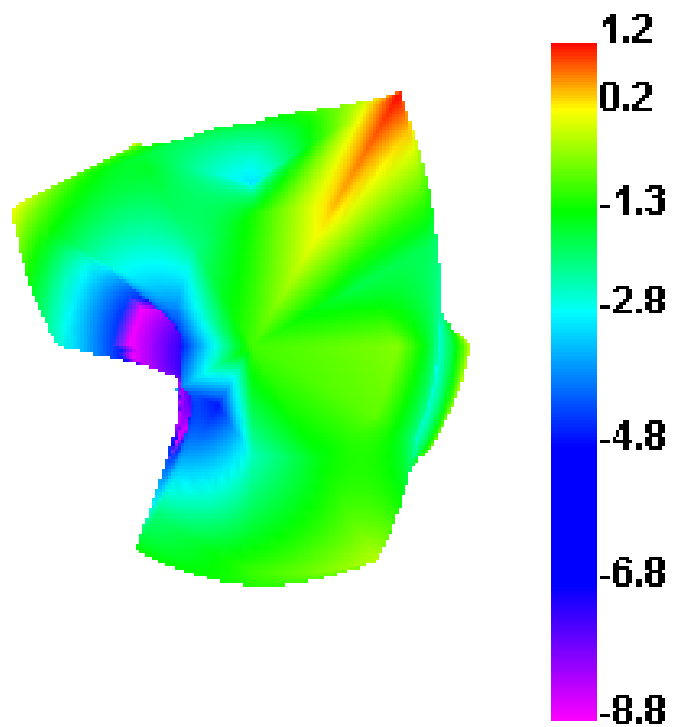
2450.000MHz





Radiation Pattern For WIFI Antenna

5500.000MHz



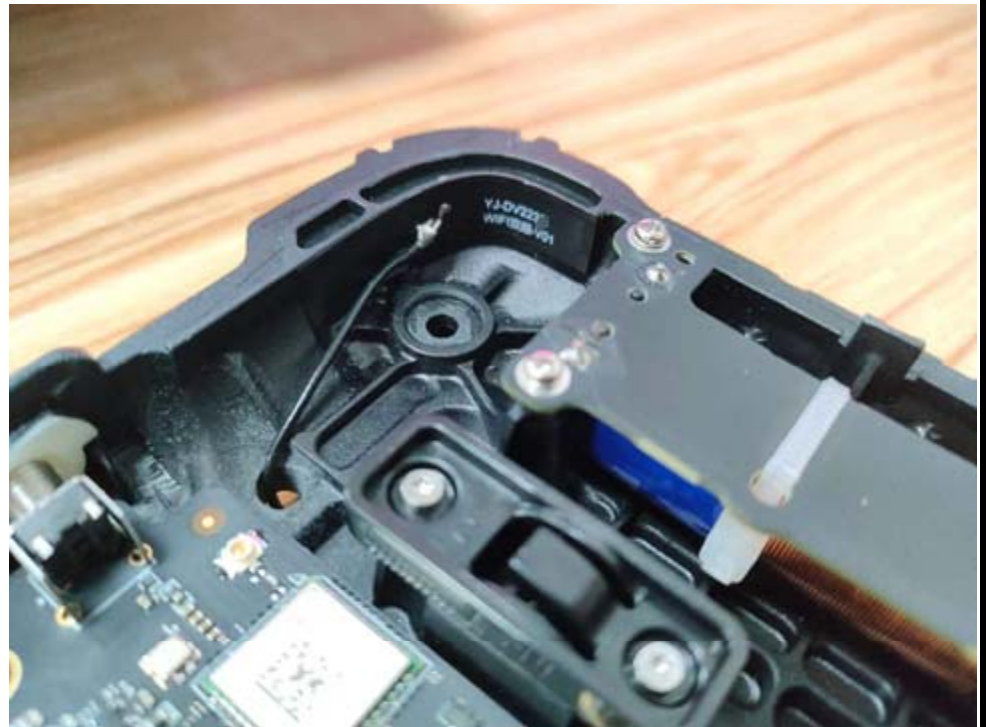


Device





WIFI Antenna





WiFi ANT



CHUNG YU INDUSTRY CORPORATION

Material Safety Data Sheet

Section 1 : Chemical Product and Company Identification

Product name	Thermal curable two-component marking ink
Other means of identification	ZSR-150 ZM-400WF
Recommended use of the chemical and restrictions on use	Use in PCB fabrication.
Manufacturer/Supplier identification	CHUNG YU INDUSTRY COPORATION
Manufacturer/Supplier address	618 Yen-Ping Rd., sec. 3, Ping-Jeng, Tao-Yuan, Taiwan
Emergency telephone No.	(886-3)4641205
FAX No.	(886-3)4644839

Section 2 : Hazards Identification Information

Hazard classifications of the product	Inflammable liquids(II),Carcinogens, (II), Inhalation of hazardous substances (I)
Label elements	 Hazard symbols: Fire Caution catchwords: Danger Hazard massages: Inflammable liquids and vapor Harmful to swallow Skin irritation Eye irritation
Other hazards	—

Section 3 : Composition, Information on Ingredients

Mixture :

Chemical name	Concentration(% of contents)	CAS. NO.
Epoxy resin	50	25085-99-8
Barium sulfate	15	7727-43-7
Titanium dioxide	30	13463-67-7
Naphtha	5	8030-30-6

Section 4 : First-aid Measures

The first-aid measures for different exposure routes:	
Eyes contact	Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids.
Skin contact	Flush skin with plenty of soap and water for at least 15 minutes while removing contaminated clothing and shoes.
Swallow	Do not induce vomiting. If conscious and alert, rinse mouth and drink 2-4 cupfuls of milk or water.
Inhalation	Remove from exposure to fresh air immediately.
The most important symptoms and hazardous effects	Headache, nausea
Notes to Physicians	Please provide the MSDS for physicians.

Section 5 : Fire-fighting Measures

Suitable fire extinguishing media	Chemical dry powders, chemical foam, carbon dioxide
General information	As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion.
Specific fire-fighting methods	It's not suitable to use water extinguish.

Section 6 : Accidental Release Measures

Person-related precautionary measures	Do not inhale vapors / aerosols. Ensure supply of fresh air in enclosed rooms.
Environmental-protection measures	Do not allow to enter sewerage system.
Procedures for cleaning / absorption	Take up with liquid-absorbent material. Forward for disposal. Clean up affected area

Section 7 : Safe Handling and Storage Measures

Handling	Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Avoid contact with eyes, skin, and clothing. Avoid ingestion and inhalation.
Storage	Store in a cool(15~25°C), dry place. Keep container closed when not in use.

Section 8 : Exposure Controls Measures

Engineering controls	Use adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits. Use process enclosure, local exhaust ventilation, or other engineering controls to control airborne levels.				
Control parameters					
	Term	8 hours time weighted average exposure limits TWA	Short-term exposure limits STEL	Maximum limits CEILING	Biological standards BEIs
	Solvent	100ppm	125ppm	—	—
Personal protective equipment	Eye protection: Wear safety glasses and chemical goggles if splashing is possible. Skin protection: Wear appropriate protective gloves and clothing to prevent skin exposure. Clothing: Wear appropriate protective clothing to minimize contact with skin. Respirators: Wear a NIOSH/MSHA or European Standard EN 149 approved full-facepiece airline respirator in the positive pressure mode with emergency escape provisions.				

Section 9 : Physical and Chemical Properties

Physical state : paste	Color : white
Odor threshold : —	Odor : slightly pungent
pH value : —	Melting point : —
Decomposition temperature : —	Boiling point : 110-190°C (solvent)
Flammability(solid, gas) : —	Flash point : 38-43°C (solvent)
Autoignition temperature : —	Test methods : —
Vapor pressure : <5 mmHg @ 25°C (solvent)	Explosion limits : —
Specific gravity/Density : 1.45~1.55 g/cm ³ (water=1)	Solubility in water : insoluble

Section 10 : Stability and Reactivity

Chemical stability	Stable under normal temperatures and pressures.
Conditions to avoid	Fire.
Incompatibilities with other materials	Strong oxidants.
Hazardous decomposition products	Irritating and toxic fumes and gases.
Hazardous polymerization	Has not been reported.

Section 11 : Toxicological Information

Information on the likely routes of exposure	Skins, swallow, inhale, eyes
Symptoms	Nausea, vertigo, irritation
Acute toxicity	Skins: Slight irritation Swallow: Nausea, vomit, and the other symptoms same as inhale Inhale: Cause the respiratory tract irritation, nausea, vomit, headache Eyes: The vapor cause eyes irritation LD50(solvent): >5000mg/kg (mouse, swallow) LC50: —
Further information	Further hazardous properties cannot be excluded. The product should be handled with the usual when dealing with chemicals

Section 12 : Ecological Information

Ecotoxic effect	Quantitative data on the ecologic effect of this product are not available.
Further ecologic data	No ecological problems are to be expected when the product is handled and due care and attention.

Section 13 - Disposal Considerations

Dispose of in a manner consistent with federal, state, and local regulations.

Section 14 - Transport Information

1. United Nation number (UN No.): 1866
2. UN proper shipping name: —
3. Transport hazard classes: 3
4. Packing group: —
5. Marine pollutant (Yes/No): No
6. Specific transport measures and precautionary conditions: —

Section 15 - Regulatory Information

1. European / International Regulations : European labeling in accordance with EC Directives.
2. Other using condition should follow local regulations.

Section 16 - Additional Information

Organization that prepared the MSDS	Name: R&D	TEL: (886-3)4641205	
	Address: 618 Yen-Ping Rd., sec. 3, Ping-Jeng, Tao-Yuan, Taiwan		
Person who prepared the MSDS	Job: manager	Name: Wan-Hua Lee	
Date the MSDS was prepared	2018/12/20		

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