



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 2017/03/28
Date

编号 17032801
File No

版本 1.0
Revision

客 户

CUSTOMER: _____

客户料号

CUSTOMER NO: _____

品 名 2.4GHz 5dBi Antenna

PART NAME: _____

供方料号 GX128W.100001.W02

SUPPLIER NO: _____

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

CiRenGuoqiang

LiuNi

QinJianyong

YJ-RD-F04-C

add: 东莞市长安镇沙头合兴路149号B栋二楼 Tel:0769-85535057 Fax:0769-81664308



承认书项目表

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11	N/A	N/A	N/A
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RoHS
Compatible

CUSTOMER
PART NO

REV.

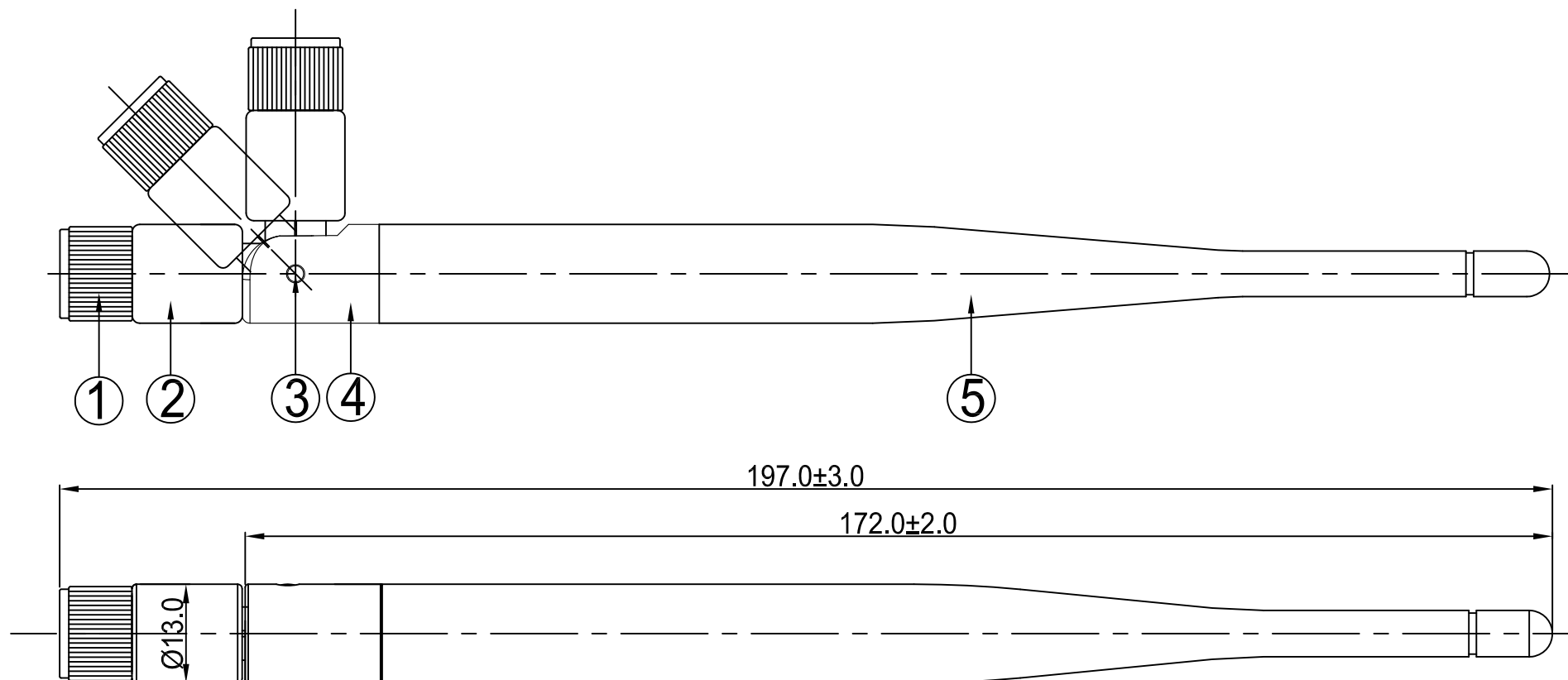


DESCRIPTION

首次发行

DATE

2017.03.17



5	Antenna Cap	TPEE ,Color:Black	1
4	Upper Base	PC, Color:Black	1
3	Rivet	POM, Color:Black	2
2	Bottom Base	PC, Color:Black	1
1	SMA Male Reverse	POM Black	1
NO	PART NAME	DESCRIPTION	Q.TY



东莞市一佳电子通讯科技有限公司

Dongguan Yijia Electronics Communication Technology Co.,Ltd. Tel :0769-85535057 Fax:0769-81664308

PART NAME: 2.4GHz 5dBi Antenna

PART NO.: GX128W.100001.W02

DATE: 2013-03-17

APPROVED BY

CHECKED BY

DESIGNED BY



Tolerance
X.X ±0.50
X.XX±0.15
X° ±3°

陈国强

汪婷

覃剑勇

UNITS: mm

SCALE: 1/1

REVISION: A



天线规格

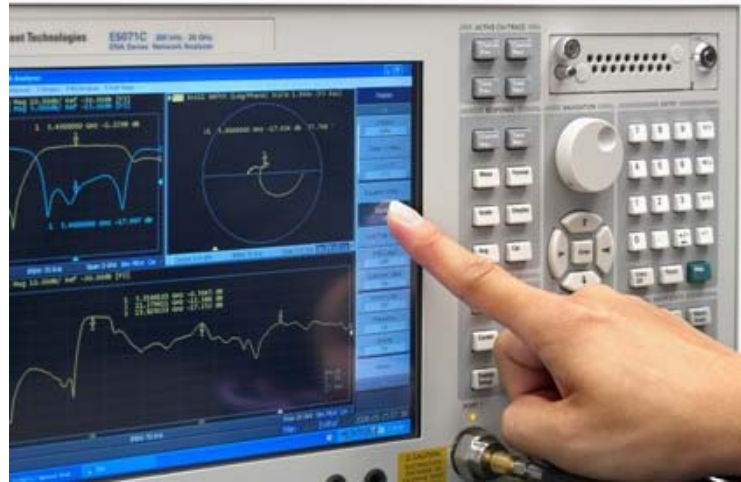
Antenna Specification

Electrical Properties	
Frequency	2400~2485MHz
Impedance	50 Ohm Nominal
V.S.W.R	See Page 5
Return Loss	See Page 5
Radiation	Omni-directional
Gain (Peak)	See Page 7
Polarization	Linear
Connector	SMA Male Reverse
Physical Properties	
Antenna Material	TPE/PC
Cable Type	None
Operating Temp.	-10 ~ +60 °C
Storage Temp.	-10 ~ +70 °C
Cable Color	None

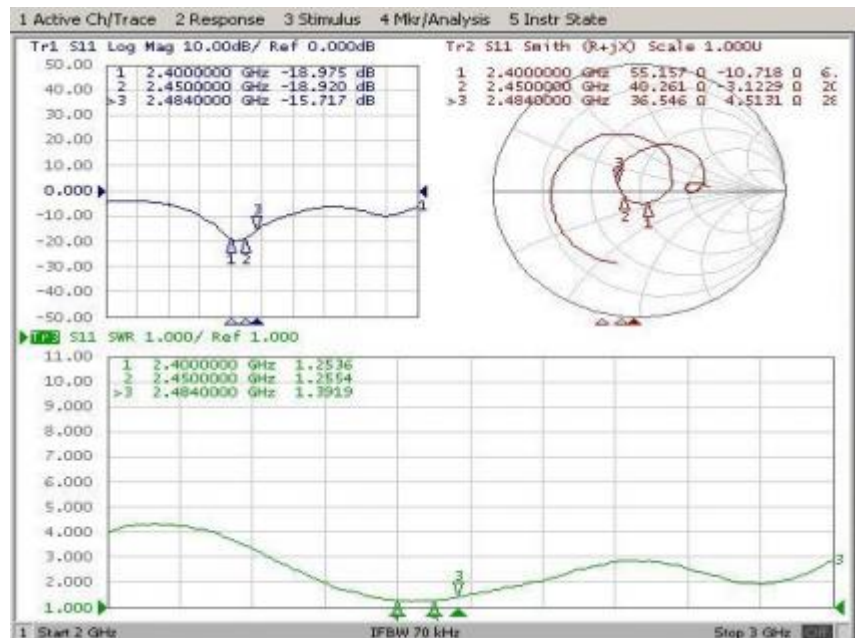


Antenna Performance Test

**Agilent
E5071B**

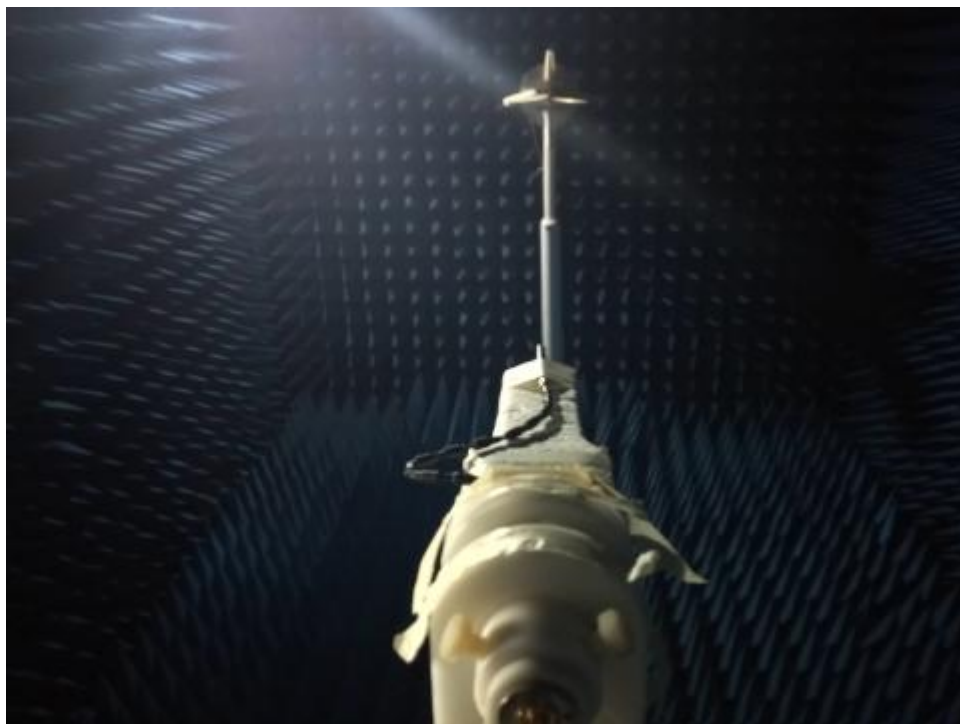


**S
Parameter
Test //
WiFi**





Antenna Passive Test





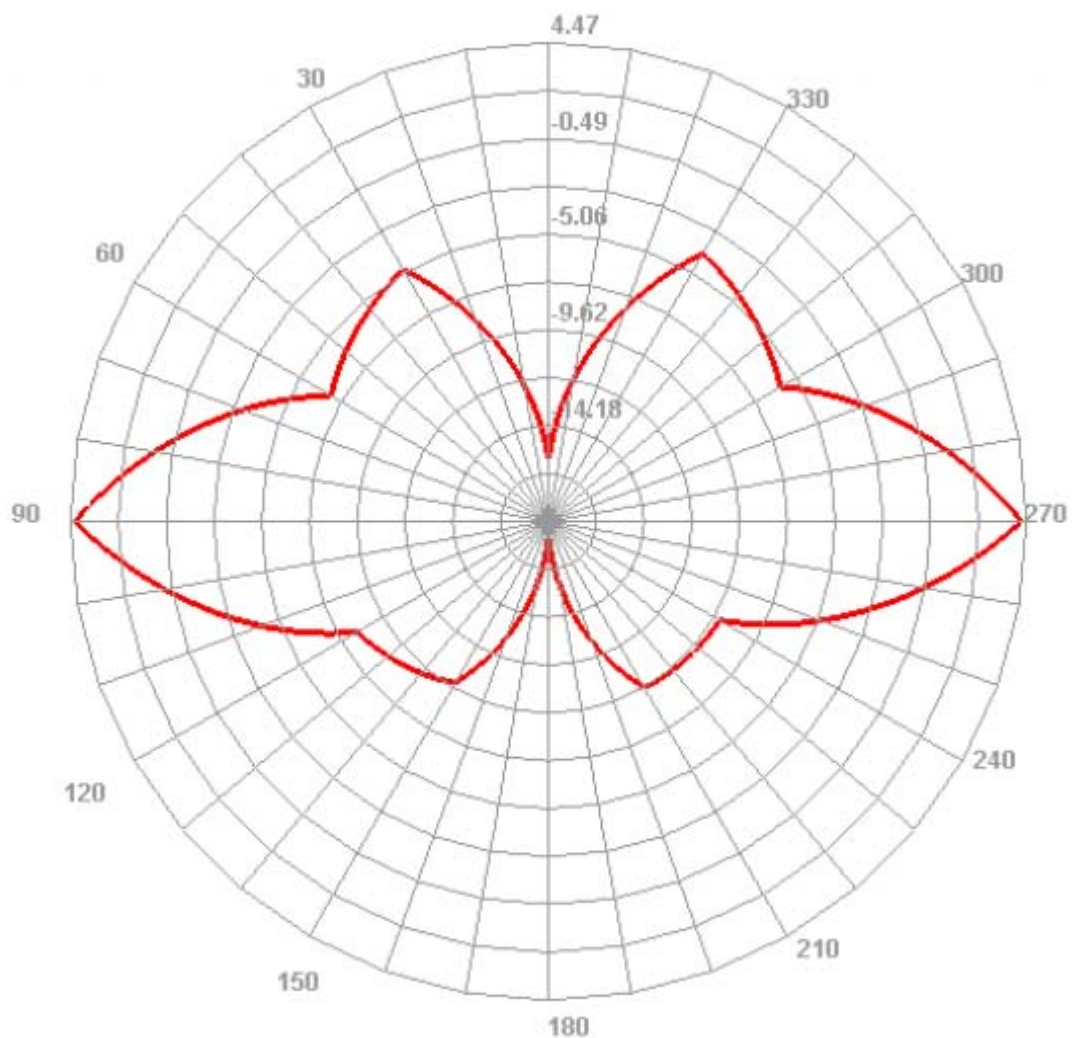
Passive Test For WiFi			
Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)
2400	77.9	-1.1	4.7
2410	79.4	-1.0	4.7
2420	79.3	-1.0	4.7
2430	80.1	-1.0	4.7
2440	77.5	-1.1	4.6
2450	78.5	-1.1	4.6
2460	79.2	-1.0	4.6
2470	81.2	-0.9	4.7
2480	80.4	-1.0	4.6
2490	77.5	-1.1	4.5
2500	75.4	-1.2	4.4



Radiation Pattern

Radiation Pattern For WIFI

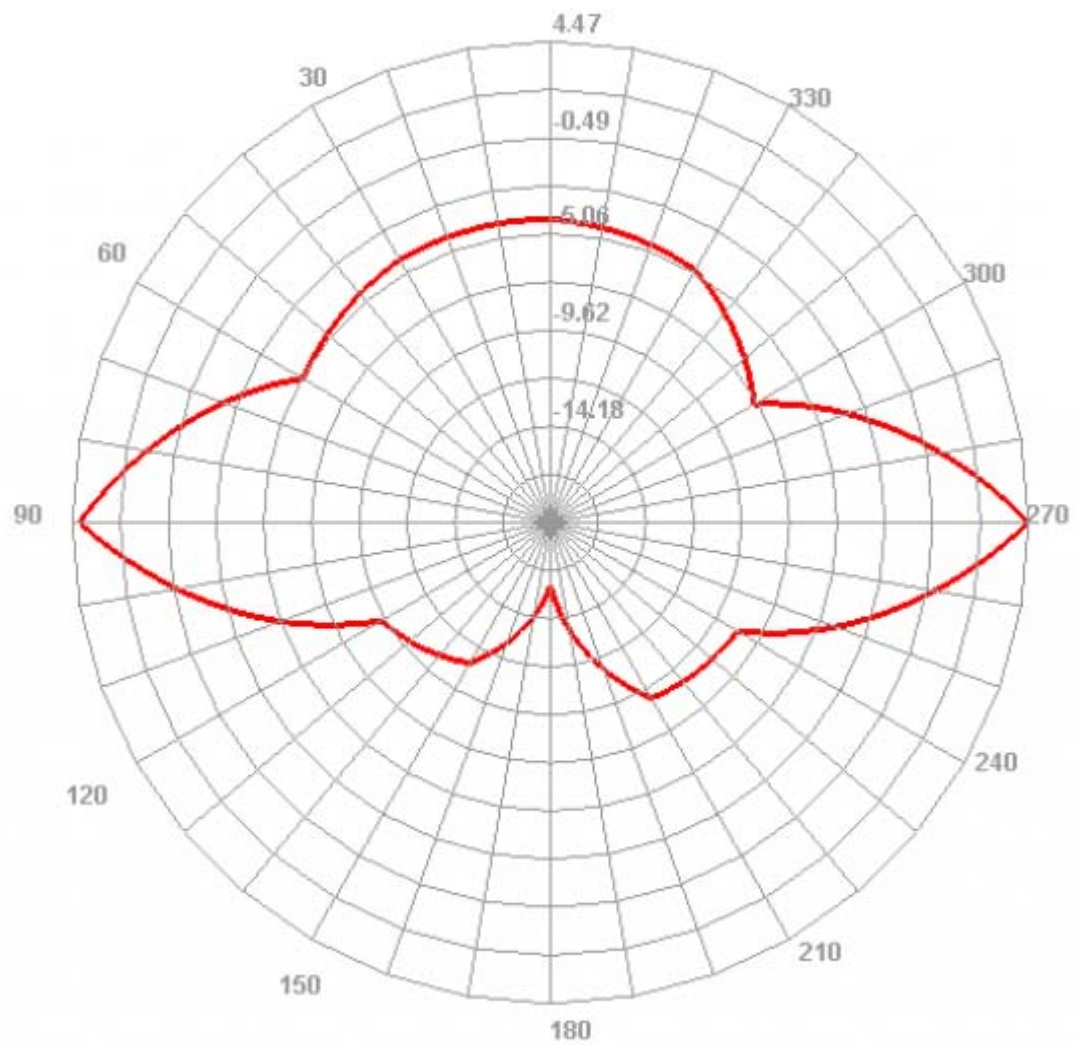
2450.000MHz E1





Radiation Pattern For WIFI

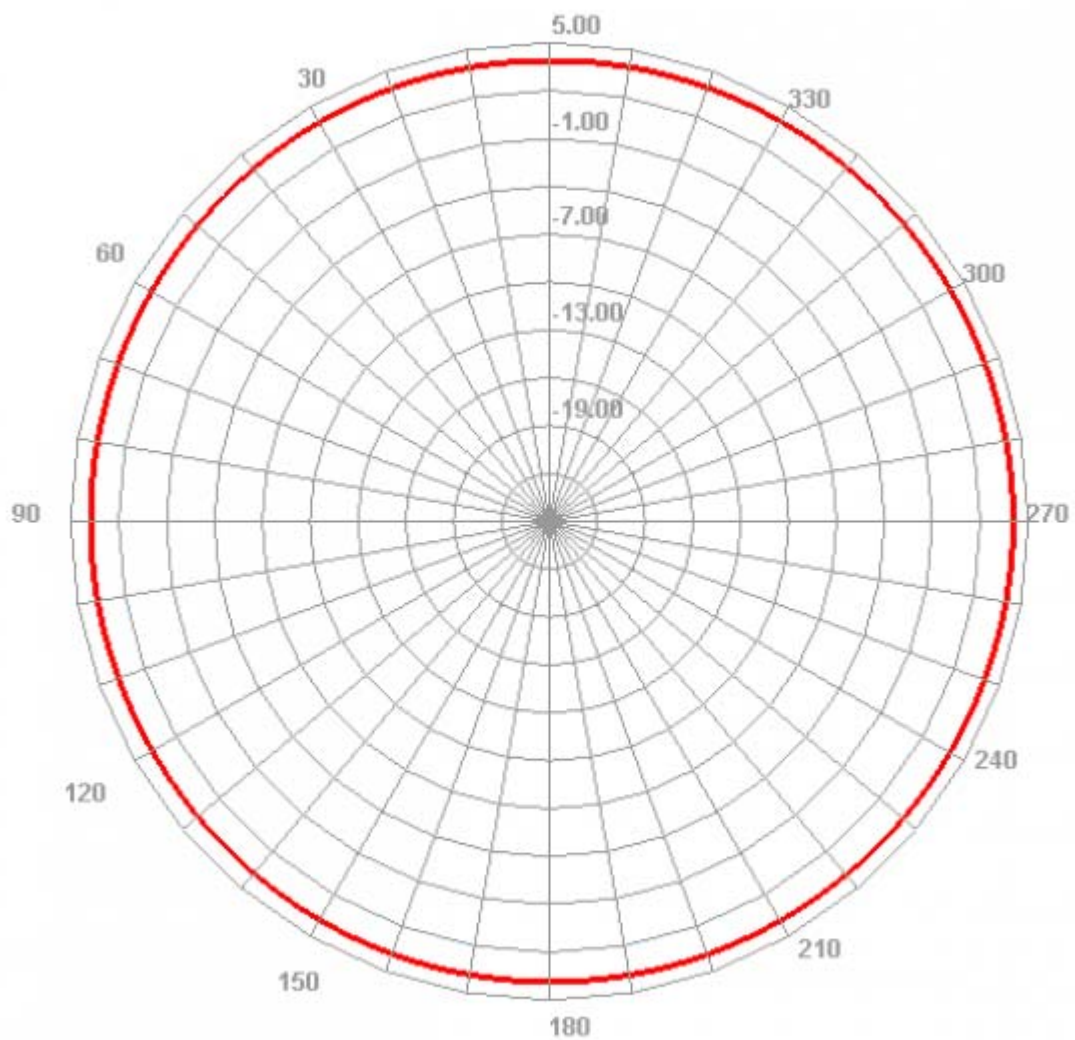
2450.000MHz E2





Radiation Pattern For WIFI

2450.000MHz H





Antenna Profile

***Antenna
WiFi***



MATERIAL SAFETY DATA SHEET (MSDS)

Issued: Feb 22, 2002

Revised: Aug 11, 2004

File No. 1001

1. CHEMICAL PRODUCT & COMPANY IDENTIFICATION

CHEMICAL PRODUCT NAME : DURACON M90-00
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 : 03-6711-8606

2. COMPOSITION/INFORMATION ON INGREDIENTS

SUBSTANCE/PREPARATION : Substance
COMMON CHEMICAL NAME : Polyoxymethylene
SYNONYMS : Polyacetal(POM)
INGREDIENTS AND COMPOSITION : POM $\geq 98\%$, Stabilizers etc. $\leq 2\%$
CHEMICAL FORMULA : $\left[\text{CH}_2 - \text{O} \right]_n / \left[\text{CH}_2\text{CH}_2\text{O} \right]_n$
SERIAL No IN OFFICIAL GAZETTE : 7-129 (base resin)
(Law Concerning Examination and Regulation of Manufacture, etc., of Chemical Substances)
CAS No : 24969-26-4 (base resin)
INGREDIENTS CONTRIBUTING TO THE HAZARD : Formaldehyde

3. HAZARDS IDENTIFICATION

MOST IMPORTANT HAZARDS : Incomplete combustion leads to generation of toxic gases such as carbon monoxide, in addition to carbonic acid gas and water.
Decomposition of polymer also leads to generation of formaldehyde.
HUMAN HEALTH EFFECTS : Not applicable
ENVIRONMENTAL EFFECTS : Not applicable
PHYSICAL AND CHEMICAL HAZARDS : It is inflammable substance and combustible if an igniting source is existent. Neither dangerous reaction, fire nor explosion can be caused under normal conditions.
THE CLASSIFICATION : Not applicable

4. FIRST-AID MEASURES

INGESTION : Help to vomit as much as possible. If sick feeling continues, 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, foam 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 formaldehyde, 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 broom or cleaner not to cause slipping.
ENVIRONMENTAL PRECAUTION	: 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	: Polyacetal resin in a pellet form will neither ignite nor explode at room temperatures, but it falls under the inflammables designated by the Fire Service Law. Keep it away from the igniting sources, as it quickly gains force once it is ignited.
HANDLING 2	: Polyacetal resin in a powdered form is likely to cause dust explosion and is therefore designated in the Guideline for Hazard of Dust Explosion in U.S. Bureau of Mines. Effective earthing means or use of inert gas like N ₂ are required for dust handling equipment to eliminate static electricity.
HANDLING 3	: Polyacetal pellets spilled on the floor are likely to cause slipping. Remove such spillage at any times.
HANDLING 4	: For molding work, effective means for local exhaust are required to discharge gases generated by melt processing.
HANDLING 5	: Avoid inhaling of gases generated in moulding work. Do not directly touch resin of high temperature.
HANDLING 6	: Avoid retaining hot resin in the processing machines for many hours.
HANDLING 7	: Avoid mixed extrusion with strong acid, oxidizing agents and PVC.
STORAGE	: Keep the substance away from any fire or heat sources for the sake of safe storage.
STORAGE 2	: This polymer is a synthetic resin designated as an inflammable substance by the Fire Service Law and should be handled in accordance with municipal rules and regulations (concerning fire-fighting equipment, indoor storage, for instance).

RECOMMENDED : No information.
PACKAGING
MATERIALS

8. EXPOSURE CONTROL / PERSONAL PROTECTION

CONTROL : None at present
CONCENTRATION

PERMISSIBLE : OSHA PEL/1985
CONCENTRATION Max. permissible concentration of inactive powder 15mg/m³
- ditto - (Aspiration) 5mg/m³
ACGIH TLV/1992 1993
Exposure limit of the powder TWA 10 mg/m³
(Reference) Human exposure to formaldehyde
- Ministry of Health & Welfare/2002
Guideline value 0.08 ppm
OSHA Parameter/1992
TWA 0.75 ppm
STEL 2 ppm
ACGIH TLV/1992 1993
TWA 0.3 ppm

ENGINEERING : When handling dust: Use totally enclosed containers resisting dust
MEASURE explosion.
When heat melted in molding: Effective local ventilation must be provided.

PERSONAL :
PROTECTIVE
EQUIPMENT

RESPIRATORY : Wear a dust-proof mask.
PROTECTION

EYE PROTECTION : Wear protective glasses or goggles.

HAND PROTECTION : Wear heat-resisting gloves against burns, when handling molten polymer.

SKIN & BODY : Wear long sleeve clothes against burns, when handling molten polymer.
PROTECTION

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE etc. : Pellet

BOILING POINT : Not applicable

VAPOUR : Not applicable
PRESSURE

VOLATILITY : Not applicable

SUBLIMATION : None

MELTING POINT : 165°C

DENSITY : 1.41

SOLUBILITY : Insoluble in water

FLASH POINT : 320°C or higher

IGNITION POINT : 400°C or higher

EXPLOSION : Not applicable
PROPERTY

INFLAMMABILITY : Inflammable(Designated as inflammable resin by the Fire Service Law)

REACTIVITY WITH : None
WATER

OXIDIZABILITY	: None
SELF-REACTIVITY	: None
DUST	: Upper explosion limit : Not applicable.
EXPLOSIVENESS	: Lower explosion limit : 35g/m ³

10. STABILITY AND REACTIVITY

STABILITY AND REACTIVITY	: Stable for normal storage or handling.
CONDITIONS TO AVOID	: Avoid contacts with strong acid, oxidizing agent or PVC under hot melt conditions.
HAZARDOUS DECOMPOSITION PRODUCTS	: Formaldehyde will be generated when heated (for drying or melting) or burnt.

11. TOXICOLOGICAL INFORMATION

SKIN CORROSIVE PROPERTIES	: 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.
CARCINOGENICITY	: No finding.
MUTAGENICITY (Microorganisms, 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	: Formaldehyde will be generated when heated (for drying or melting) or burnt.
OTHER CAUTIONS 3	: Carcinogenicity class of formaldehyde, which may be generated if overheated. IARC (International Agency for Research on Cancer): Group 1

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 Duracon 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 CAUTIONS	: Handle with care so as not to give damages to containers or not to be subjected to wetting.
OTHER CAUTIONS 2	: Secure the containers firmly so as not to cause collapsing.

15. REGULATORY INFORMATION

FIRE SERVICE LAW	: Inflammable synthetic resin Designated quantity: More than 20m ³ for the foamed product. More than 3,000 kg for other types.
WASTE DISPOSAL LAW	: Waste plastics among industrial wastes.
OTHERS	: Formaldehyde is designated as Class 3 substance by the Industrial Safety and Health Law (Regulations concerning hazards caused by specific chemicals) and designated as deleterious substance by the Poisons and Deleterious Substance Control Law. Recommended usage, criteria, and limit values are provided by Japan Industrial Safety and Health Society, OSHA and ACGIH.

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

MATERIAL SAFETY DATA SHEET

1. Chemical product and company identification

Product name Panlite® L-1250Y
MSDS Number L1250Y-0101JpE
Company name TEIJIN CHEMICALS LTD.
Address 2-1, Kasumigaseki 3-chome, Chiyoda-ku, Tokyo 100-8585, Japan
Division Corporate Social Responsibility Staff Office
Telephone number +81 3-3506-4717
Fax +81 3-3580-6680
Emergency telephone number Matsuyama factory quality assurance section TEL: +81 89-973-7103
Intended use Molding material for industry use

2. Hazards identification

GHS-classification

Physical hazards	Flammable solid	Not classified
Health hazards	Acute toxicity (Oral, Inhalation, Dermal)	Not classified
	Skin corrosion/irritation	Not classified
	Serious eye damage/eye irritation	Not classified
	Respiratory sensitization	Not classified
	Skin sensitization	Not classified
	Germ cell mutagenicity	Not classified
	Carcinogenicity	Not classified
	Reproductive toxicity	Not classified
	Specific target organ toxicity - single exposure	Not classified
	Specific target organ toxicity - repeated exposure	Not classified
Environmental hazards	Aspiration toxicity	Not classified
	Acute aquatic toxicity	Not classified
	Chronic aquatic toxicity	Not classified

*Hazards not stated here are "Not applicable" or "Classification not possible".

Precautionary statement

Prevention Observe good industrial hygiene practices.
Response Get medical advice/attention if you feel unwell.
Storage Store in a closed container.
Disposal Dispose of waste and residues in accordance with local authority requirements.

National/local information See section 15 for regulatory information.

3. Composition/information on ingredients

Substance or Mixture Substance

Components	CAS #	Gazette notification		
		ENCS no.	ISHL no.	Concentration (%)
Polycarbonate resin	25971-63-5	(7)-738	(7)-738	95-100
Chemical formula: (C15H16O2.CCl2O)x (25971-63-5)				

4. First aid measures

In case of inhalation In case of inhalation of dusts or fumes from heated product: Move injured person into fresh air and keep person calm under observation. Get medical attention if any discomfort continues.

Skin contact Rinse with water. Get medical attention promptly if symptoms persist or occur after washing. If burned by contact with hot material, cool molten material adhering to skin as quickly as possible with water, and see a physician for removal of adhering material and treatment of burn.

Eye contact Dust in the eyes: Do not rub eyes. Flush thoroughly with water. If irritation occurs, get medical assistance.

Ingestion Rinse mouth thoroughly. Large quantities: Get medical attention if symptoms occur.

Expected acute and delayed symptoms	None.
Protection of first-aid responders	First aid personnel must be aware of own risk during rescue.
Notes to physician	Treat symptomatically.
5. Fire-fighting measures	
Extinguishing media	Extinguish with foam, carbon dioxide, dry powder or water fog.
Extinguishing media to avoid	None.
Specific hazards	During fire, gases hazardous to health may be formed.
Special fire fighting procedures	Use standard firefighting procedures and consider the hazards of other involved materials.
Protection of fire-fighters	Selection of respiratory protection for fire fighting: follow the general fire precautions indicated in the workplace.

6. Accidental release measures

Personal precautions, protective equipment and emergency measures	Avoid inhalation of dust. See Section 8 of the MSDS for Personal Protective Equipment.
Environmental precautions	Do not allow to enter drains, sewers or watercourses.
Recovery and neutralization	Collect and dispose of spillage as indicated in Section 13 of the MSDS.

7. Handling and storage

Handling	
Technical measures	Use explosion-proof electrical equipment if airborne dust levels are high.
Local and general ventilation	Provide adequate ventilation.
Precautions	Use work methods which minimize dust production. Wear appropriate personal protective equipment.
Safe handling advice	Avoid inhalation of dust. Avoid prolonged or repeated contact with skin. Avoid vapors from heated materials to prevent exposure to potentially toxic/irritating fumes.
Storage	
Technical measures	Avoid dust formation.
Suitable storage conditions	Store in closed original container in a dry place.
Safe packaging materials	Keep in original container.

8. Exposure controls/personal protection

Engineering measures	Provide adequate ventilation. Japan Society of Occupational Health, class 3 dust (limestone, other inorganic and organic dusts): respirable dust 2 mg/m ³ , total dust 8 mg/m ³ .
Personal protective equipment	
Respiratory protection	Wear respirator if there is dust formation. When the product is heated, use suitable respiratory equipment with gas filter for organic gas.
Hand protection	For prolonged or repeated skin contact use suitable protective gloves. When material is heated, wear gloves to protect against thermal burns.
Eye protection	Use tight fitting goggles if dust is generated. If contact with hot material may occur, safety glasses and face shield are recommended.
Skin and body protection	No protection is ordinarily required under normal conditions of use.
Hygiene measures	Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

9. Physical and chemical properties

Appearance	
Physical state	Solid.
Form	Pellets.
Color	Natural.

Odor	None.
pH	Not applicable.
Melting point/Freezing point	> 464 °F (> 240 °C)
Boiling point, initial boiling point, and boiling range	Not applicable.
Flash point	> 971.6 °F (> 522 °C)
Auto-ignition temperature	> 1022 °F (> 550 °C)
Combustion characteristics (solid, gas)	Not available.
Flammability limit - lower (%)	Not available.
Flammability limit - upper (%)	Not available.
Vapor pressure	Not applicable.
Vapor density	Not available.
Specific gravity	1.2
Solubility	Insoluble in water.
Partition coefficient (n-octanol/water)	Not available.
Decomposition temperature	Not available.
Other data	
Molecular formula	(C ₁₅ H ₁₆ O ₂ .CCl ₂ O) _x

10. Stability and reactivity

Stability	Stable under normal temperature conditions.
Possibility of hazardous reactions	Will not occur.
Conditions to avoid	None known.
Incompatible materials	No data available.
Hazardous decomposition products	During combustion: Carbon monoxide. Carbon Dioxide.

11. Toxicological information

Acute toxicity	May cause discomfort if swallowed.
Skin corrosion/irritation	No adverse effects due to skin contact.
Serious eye damage/eye irritation	Dust in the eyes will cause irritation. May cause redness and pain.
Respiratory sensitizer	None known.
Skin sensitizer	None known.
Germ cell mutagenicity	None known.
Carcinogenicity	None known.
Toxic to reproduction	None known.

12. Ecological information

Ecotoxicity	The product components are not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.
Persistence/degradability	None known.
Bioaccumulation	None known.
Mobility in soil	The product is insoluble in water and will sediment in water systems.
Other hazardous effects	None known.

13. Disposal considerations

Residual waste	Dispose of waste at a facility with special permission to dispose industrial wastes. Waste should be accompanied by a manifest for the industrial waste. Dispose of in accordance with local regulations. Do not discharge into rivers, lakes, mountains, etc. because the product may affect the environment.
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Contaminated packaging

Since emptied containers may retain product residue, follow label warnings even after container is emptied.

14. Transport information**ADR**

Not regulated as dangerous goods.

IATA

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

15. Regulatory information**Industrial Safety and Health Law****Substances subject to notification**

Not regulated.

Substances subject to labeling

Not regulated.

Poisonous and Deleterious**Substances Control Law**

Not regulated.

Chemical Substances Control Law

Not regulated.

PRTR and Promotion of Chemical Management Law**Class 1 substances (substance name and cabinet order number)**

Not regulated.

Class 2 substances (substance name and cabinet order number)

Not regulated.

Fire service law

Not dangerous goods under Fire Service Law.

16. Other information

The information about colorant is not contained in this MSDS.

This information is provided without warranty. The information is believed to be correct. The precautions in this MSDS are intended for normal use. Please take safety measures appropriate to the use and the application when handling the product in a special way. This information should be used to make an independent determination of the methods to safeguard workers and the environment.

Version number

01

Issue date

04-13-2009

Revision date

04-13-2009

MATERIAL SAFETY DATA SHEET

1、Product and Company Identification

Product name : TPEE RESIN(Thermoplastic Polyester Elastomer)
Synonyms : TPEE CHANG CHUN 1163
Chemical Formula : $(C_{10}H_{10}O_4C_4H_{10}O_2(C_4H_8O)_nH_2O)_x$
Product Codes : 11series,12series, that include 1140H,1155L,1255L, etc.
Supplier Information : Chang Chun Plastics Co.,Ltd 301 Songkiang Road, 7th FL., Taipei, Taiwan, 10477
Emergency phone numbers : Tel 886-2-25038131, 886-2-25001800

2、Composition / Information on Ingredients

Ingredient	CAS Number	Percent (by weight)
Thermoplastic Polyester Elastomer	9078-71-1	>99%

3、Hazards Identification

Emergency Overview : Hazard warning not required
Adverse Human Health Effects : Vapour and fumes released at elevated temperature may be irritant for the eyes,the nose,the throat and respiratory tract and in case of overexposure may cause nausea and headache.
Environmental Effects : No Information available
Physical and Chemical Hazards : No Information available
Specific Hazards : No Information available

4、First-Aid Measures

Inhalation : When fumes of molten material have been inhaled: - Move person to fresh air as quickly as possible - Rest in half upright position - Loosen clothing - Keep warm
Ingestion : No danger of toxicity,this material is biologically inactive
Skin Contact : If molted material contacts skin , cool rapidly with cool water,and seek medical attention. Attention : never pull off the molten material from the wound.
Eye Contact : Flush with water, and seek medical attention if it is necessary.

Protection of First-aiders : No Information available

Notes to Physician : If melted material contacts, cool rapidly with cool water, and seek medical attention.

5、 Fire-Fighting Measures

Extinguishing Media : Water, foam, carbon dioxide, dry chemical

Fire and Explosion Hazards : NA

Special Firefighting Procedures : Treat as a "class A" fire and avoid to breathe dust.
--

Special Equipment for the Protection of Firefighters : Wear personal protective equipment

6、 Accidental Release Measures

Personal Precautions : Wear personal protective equipment

Environmental Precautions : This material presents no danger regarding toxicological and ecological consideration.
--

Methods for Cleaning Up : Sweep up and place in disposal container and it could be recycled.
--

7、 Handling and Storage

Handling : Make provisions for sufficient ventilation and local exhaust at vent, nozzle . Dust and processing fumes must be removed by effective exhaust ventilation.
--

Storage : Store in a cool and dry place

8、 Exposure Controls / Personal Protection

Engineering Measure : NA

Control parameters : OSHA PEL (nuisance/inhale dust): 15 mg/M ³ (total), 5 mg/M ³ (respirable) ACGIH TLV (nuisance/inhale dust): 10 mg/M ³ (total), 5 mg/M ³ (respirable) • Limit values : NA • Biological Standards : NA
--

Personal Protective Equipment : helmet, mask, safety shower, eye wash fountain • Respiratory Protection : dust mask • Hand Protection : plastic or rubber gloves • Eye Protection : wear safety goggles • Skin and Body Protection : wear protective gloves and clean body-covering clothing.

Specific Hygiene Measures : Adequate washing facilities with supplies of mild soap and hand cleaner should be available at all working locations. Solvents should never be used as hand cleaners. Smoking, eating and drinking in working and storage area should be prohibited.
--

9、Physical and Chemical Properties

Physical State : Solid	Form : Pellet
Color : White	Odor : odorless
pH : ND	Boiling Point/Boiling Range : ND
Decomposition Temperature : >300°C	Flash Point & Method Used : >355°C
Auto Ignition Temperature : >420°C	Explosion Properties : ND
Vapor pressure : ND	Vapor density : ND
Density : 1.05-1.25	Solubility : ND

10、Stability and Reactivity

Stability : Stable under ordinary conditions of use and storage
Possible Hazardous Reactions Occurring under Specific Conditions : NA
Conditions to Avoid : Don't heat to >300°C for long residence time to avoid thermal degradation.
Materials to Avoid : strong bases , strong oxidising agents
Hazardous Decomposition Products : CO

11、Toxicological Information

Acute toxicity : None
Local effects : The material appears to be a non-toxic substance in standard toxicological and ecotoxicological tests and is regarded as biologically inactive.
Sensitization : None
Chronic Toxicity or Long Term Toxicity : None
Specific effects : None

12、Ecological Information

Possible Environmental Effects, Behavior and Fate : Not hazardous in contact with water

13、Disposal Considerations

Recommended Methods for Safe and Environmentally Preferred Disposal : It can be burnt in a controlled way or be disposed of via landfill, or it can be recycle used

14、Transport Information

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International regulations : None
UN classification number : N.A.
Specific Precautionary Transport Measures and Conditions : No hazardous transporation product. Keep away from moisture.

15、Regulatory Information

Applicable Regulations : None

16、Other Information

NFPA Ratings : ---
Label Hazard Warning : The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied , with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purpose. In no way shall the company be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, however arising, even if the company has been advised of the possibility of such damages
Literature References : ---

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