KINGFA

KINGFA'S SOLUTIONS FOR HOME APPLIANCE PRODUCTS



COMPREHENSIVE SOLUTIONS FOR SMART HOMES

WE PROVIDE COMPREHENSIVE SOLUTIONS FOR SMART HOMES



Refrigerator



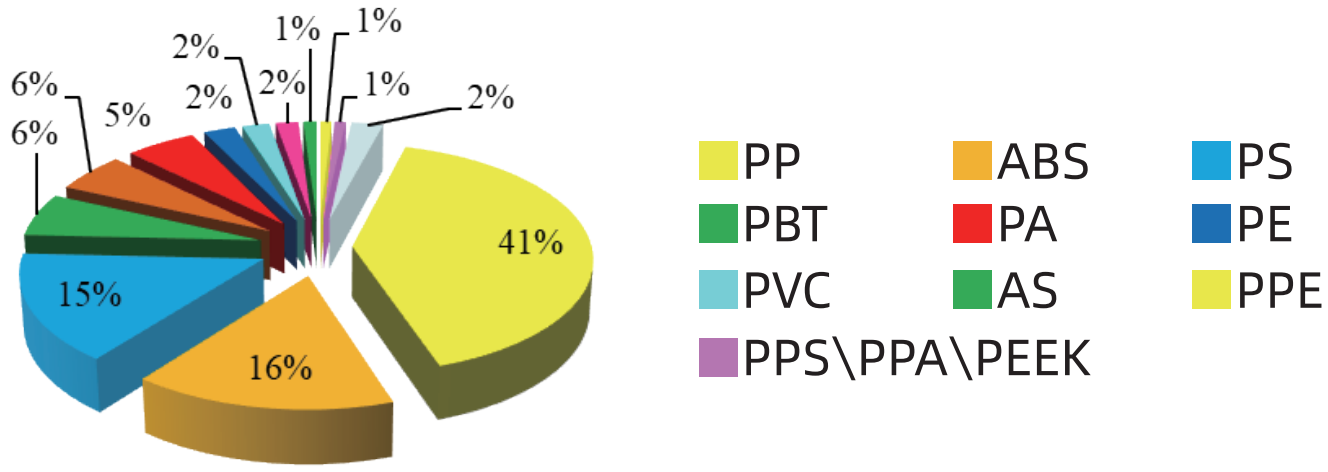
Air Conditioner



Washer



Dishwasher



· Kingfa offers a diverse array of premium materials to elevate the performance of household devices.

· Kingfa materials are extensively employed in a wide range of home appliances.

THE MOST CREATIVE GLOBAL PROVIDER OF COMPREHENSIVE SOLUTIONS FOR NEW MATERIALS IN HOME APPLIANCES

- Degradable materials
  Bio-based materials
- Bio-materials
  PCR materials
- High-efficiency materials

Low-carbon & Eco-friendly

Aesthetic Products

- Color matching
  Spray-free materials.
- Optical materials
  Fiber materials
- Fabric-textured materials
  Stone-textured materials

- Flame retardant
  low smoke
  ablation-resistant
- Temperature-resistant
  Acid/alkali-resistant
  Pressure-resistant
- Food-safe
  Llow VOC

Aesthetic Products

Functional Materials

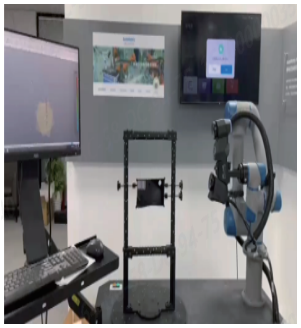
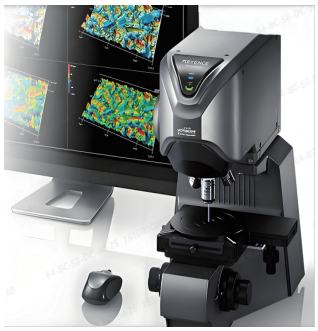
- Antibacterial
  Anti-mold
  Anti-allergenic
  Easy-to-clean
- Reinforced
  Ttoughened
  Anti-static

01

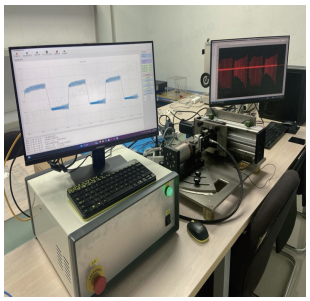
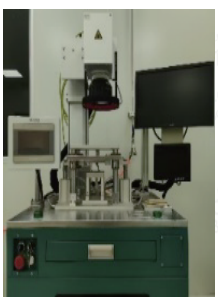
Leading Industry Trends, Pioneering Material Development: Driving material innovation and upgrades.

02

Leading Industry Evaluation Center for Innovative Applications in Home Appliances




SOLUTIONS FOR SPLIT AIR CONDITIONER

Panel (>2,000t/Y)
·**ABS:** HP-126
·**HIPS:** HIPS-5197

Filter holder (>2,000t/y)
·**Filled PP:** PP-TC15GXX

Evaporator bracket (>500t/y)
·**GFPP:** GFPP-20

Panel body
·**HIPS:** HIPS-5197

Base
·**ABS:** HP-126
·**HIPS:** HIPS-5197

Cross flow fan(>1,000t/y)
·**GF Filled AS:** GFAS-20

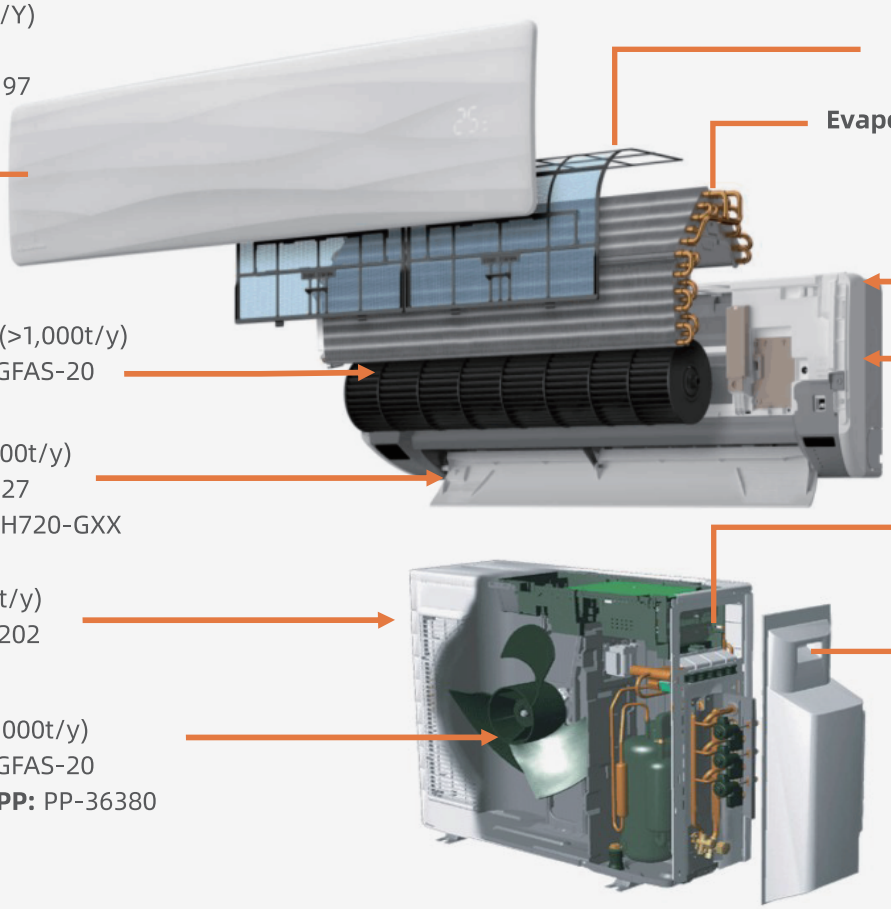
Deflector (>5,000t/y)
·**HR ABS:** HR-527
·**GF Filled PC:** JH720-GXX

Electric control box (>25,000t/y)
·**FRABS:** HF-606
·**PVC/ABS:** PVC-PM

Grille (>25,000t/y)
·**Filled PP:** AP-202

Handle (>1,500t/y)
·**Weather resistant PP:** PMF-6XXX
·**FRPP:** PP-R0508/NHPP

Axial fan (>20,000t/y)
·**GF Filled AS:** GFAS-20
·**GF&MF Filled PP:** PP-36380

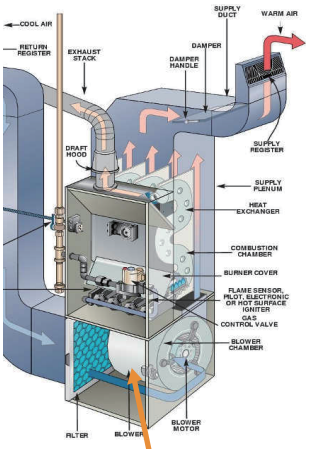


Indoor Unit



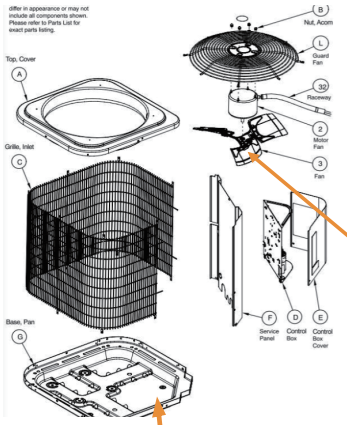
Drain Pans
·**FR PBT:** PBT-RG301
·**FR PBT/PC:** PBT2-R13G15
·**FR PP:** PP-R0508; GFPP-R30

Furnace



Inducer Motor
·**GF&MF PP:**
HPP-GKN411A0

Outdoor Unit



Base Pans
·**GF Filled PP:**
GFPP-35UV
GFPP-40UV

Fan Blade
·**GF Filled PP:**
GFPP-35 UV
·**GF&MF Filled PP:**
PP-36380
·**GF Filled SAN:**
GFAS-20/30

SOLUTIONS FOR REFRIGERATOR & WASHER

Liner(>200t/y)
HIPS: HIPS-5197
ABS: HP-126

Fruit Box (>1,000t/y)
GPPS: GPPS-450
SAN: KSAN

Drawer (>5,000t/y)
GPPS: GPPS-450
Filled PP: PP-11269



Cover (>200t/y)
ABS: ABS-660

Electric Control Box (>200t/y)
FR-ABS: FW-620
FR-PC/ABS: JH980

Tub (>20,000t/y)
GF Filled PP: GFPP-20/30/40
Talc Filled PP: PP-11278
GF&MF Filled PP: PP-36380



Panel (>2,000t/y)
ABS: HP-126
PC/ABS: JH-960

Detergent Tank (>2,000t/y)
Talc Filled PP: PP-11270

Outer Insulation Ring (>2,000t/y)
Talc Filled PP: PP-11270

Electric Control Box (>2,000t/y)
FR PP: PP-R0508/NHPP-FR
FR PC/ABS: JH960

Inner Insulation Ring (>2,000t/y)
Talc Filled PP: PP-11270

MATERIAL INNOVATION & APPLICATION

Comfort & Health

·Low-Noise Materials
·Easy-to-Clean Materials
·Antibacterial and Anti-Mold Materials

Safety & Reliability

·Ablation-Resistant Materials
·Insect-Repellent Materials

MATERIAL INNOVATION & APPLICATION

Metal Replacement

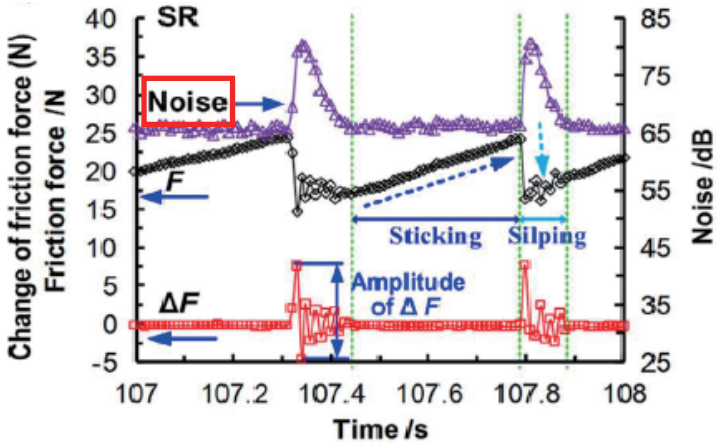
·Plastic Replacing Steel
·Plastic Replacing Copper

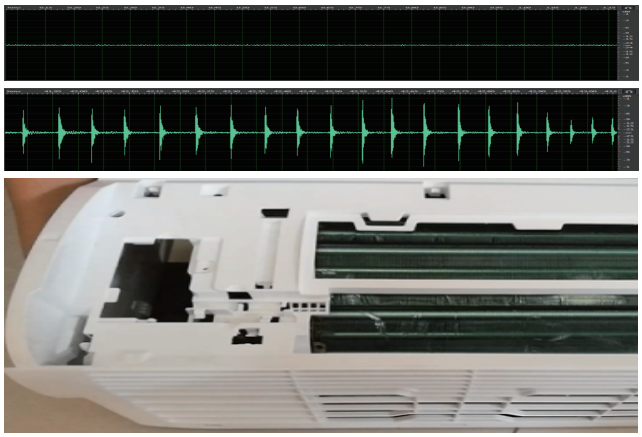
Chemical Resistance

·Solvent-Resistant Materials
·Foaming Agent-Resistant Materials
·Refrigerant-Resistant Materials

COMFORT AND HEALTH

LOW-NOISE MATERIALS





Kingfa's low-noise materials significantly reduce noise, Suitable for indoor and outdoor parts of wall-mounted and cabinet air conditioners.

EASY-TO-CLEAN MATERIALS





Reduced rolling angle prevents water droplet retention, achieving easy-cleaning.

ANTIBACTERIAL & ANTI-MOLD MATERIALS

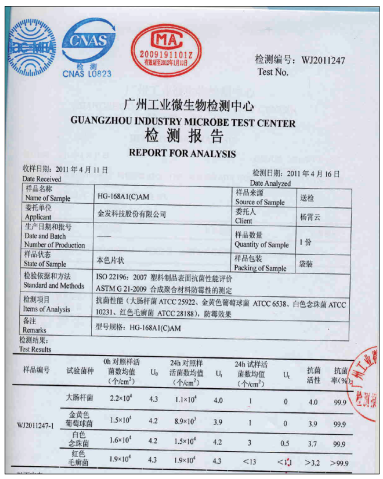





· China Antimicrobial Industry Association (CIAA) Vice Chairman Unit.

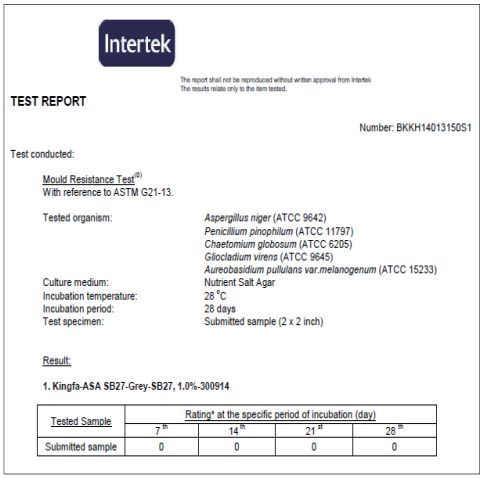
· Japan Antibacterial Products Technology Council (SIAA)

· Kingfa's ABS and PS antibacterial modified materials have been registered.



广州工业微生物检测中心
GUANGZHOU INDUSTRY MICROBE TEST CENTER
检 测 报 告
REPORT FOR ANALYSIS

Test No.: WJ2011247



Intertek

TEST REPORT

Number: BKKH14013150S1

Test conducted:

Mould Resistance Test[®]
With reference to ASTM G21-13.

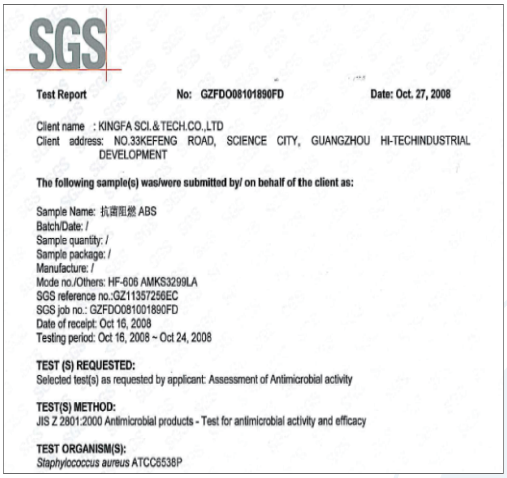
Tested organism:
Aspergillus niger (ATCC 9642)
Penicillium pinophilum (ATCC 11797)
Chaetomium globosum (ATCC 6205)
Gliocladium virens (ATCC 9645)
Aureobasidium pullulans var.melanogenum (ATCC 15233)

Culture medium: Nutrient Salt Agar
Incubation temperature: 28 °C
Incubation period: 28 days
Test specimen: Submitted sample (2 x 2 inch)

Result:

1. Kingfa-ASA SB27-Grey-SB27, 1.0%-300914

Tested Sample	Rating* at the specific period of incubation (day)			
	7th	14th	21st	28th
Submitted sample	0	0	0	0



SGS

Test Report No: GZFDO08101890FD Date: Oct. 27, 2008

Client name : KINGFA SCI.& TECH.CO.,LTD
Client address: NO.33KEFENG ROAD, SCIENCE CITY, GUANGZHOU HI-TECHINDUSTRIAL DEVELOPMENT

The following sample(s) was/were submitted by/ on behalf of the client as:

Sample Name: 抗菌阻燃 ABS
Batch/Date: /
Sample quantity: /
Sample package: /
Manufacture: /
Mode no./Others: HF-606 AMKS3299LA
SGS reference no.:GZ11357256EC
SGS job no.: GZFDO08101890FD
Date of receipt: Oct 16, 2008
Testing period: Oct 16, 2008 ~ Oct 24, 2008

TEST (S) REQUESTED:
Selected test(s) as requested by applicant: Assessment of Antimicrobial activity

TEST(S) METHOD:
JIS Z 2801:2000 Antimicrobial products - Test for antimicrobial activity and efficacy

TEST ORGANISM(S):
Staphylococcus aureus ATCC6538P

·Japan JIS Z2801:2000: Antibacterial testing against Staphylococcus aureus

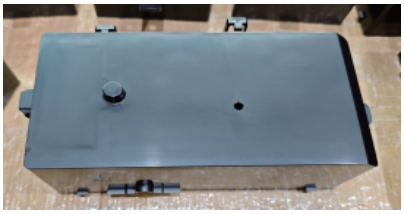
·ISO 22196:2007: Antibacterial properties of plastic surfaces

·USA ASTM G21-13: Determination of antifungal propertie

SAFETY AND RELIABILITY

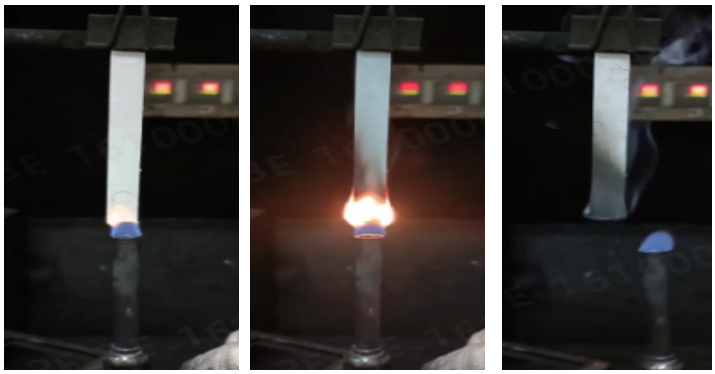
ANTIMONY FREE ABS

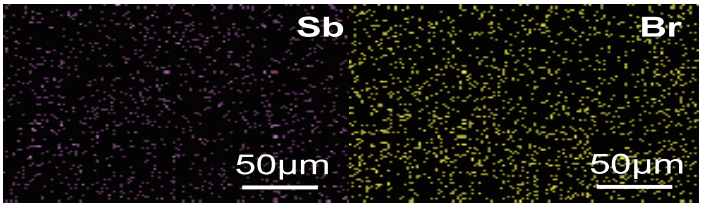
Lead the Innovation of Bromine-Based Flame Retardant ABS Technology

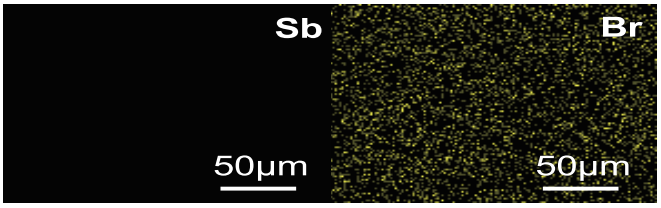


GRADE:ABS-RDN535D2

	With Antimony	Antimony Free
Tensile Strength	38	37
Impact	20	18
Flexural Strength	60	60
HDT	80	80
GWIT	700	750







2025/5/21 08:50 UL Certification: E171666 - Component - Plastics

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PROSPECTOR® CLICK TO CONTINUE
View additional material information including performance and processing data

The information presented on the UL Prospector datasheet was acquired by UL Prospector from the producer of the material. UL Prospector makes substantial efforts to assure the accuracy of this data. However, UL Prospector assumes no responsibility for the data values and strongly encourages that upon final material selection, data points are validated with the material supplier.

Component - Plastics E171666

Guide Information View Certificate of Compliance

KINGFA SCI & TECH CO LTD

33 KEFENG RD, SCIENCE CITY, GUANGZHOU HI-TECH, INDUSTRIAL DEVELOPMENT ZONE, GUANGZHOU Guangdong 510660 CN

ABS-RDN52(a1) D2, ABS-RDN53(a1) D2, ABS-RDN54(a1) D2, ABS-RDN55(a1) D2

Acrylonitrile Butadiene Styrene (ABS), flame retardant, furnished as pellets

Color	Min. Thk (mm)	Flame Class	HWI	HAI	RTI Elec (°C)	RTI Imp (°C)	RTI Str (°C)
ALL	1.5	V-0	-	-	60	60	60
	2.0	V-0	-	-	60	60	60
	2.5	V-0, 5VA	-	-	60	60	60
	3.0	V-0, 5VA	-	-	60	60	60

Comparative Tracking Index (CTI): 0
Dielectric Strength (kV/mm): -
High-Voltage Arc Tracking Rate (HVTR): -
Dimensional Change (%): -

Inclined Plane Tracking (IPT) kV: -
Volume Resistivity (10^x ohm-cm): -
Surface Resistivity (10^x ohms/square): -
High Volt, Low Current Arc Resis (D495): -

(a1) - Replaced by a digit from 0 to 9 or letter from A to Z to represent the internal code

ANSI/UL 94 small-scale test data does not pertain to building materials, furnishings and related contents. ANSI/UL 94 small-scale test data is intended solely for determining the flammability of plastic materials used in the components and parts of end-product devices and appliances, where the acceptability of the combination is determined by UL.

Report Date: 2025-05-20
Last Revised: 2025-05-20

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c UL us ALSO CERTIFIED TO IEC REQUIREMENTS

2025/5/21 10:05 UL Certification: E171666 - Component - Plastics

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PROSPECTOR® CLICK TO CONTINUE
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Component - Plastics E171666

Guide Information View Certificate of Compliance

KINGFA SCI & TECH CO LTD

33 KEFENG RD, SCIENCE CITY, GUANGZHOU HI-TECH, INDUSTRIAL DEVELOPMENT ZONE, GUANGZHOU Guangdong 510660 CN

ABS-RDN42(a1) D2, ABS-RDN43(a1) D2, ABS-RDN44(a1) D2, ABS-RDN45(a1) D2

Acrylonitrile Butadiene Styrene (ABS), flame retardant, furnished as pellets

Color	Min. Thk (mm)	Flame Class	HWI	HAI	RTI Elec (°C)	RTI Imp (°C)	RTI Str (°C)
ALL	2.0	V-0	-	-	60	60	60
	2.5	V-0, 5VA	-	-	60	60	60
	3.0	V-0, 5VA	-	-	60	60	60

Comparative Tracking Index (CTI): 0
Dielectric Strength (kV/mm): -
High-Voltage Arc Tracking Rate (HVTR): -
Dimensional Change (%): -

Inclined Plane Tracking (IPT) kV: -
Volume Resistivity (10^x ohm-cm): -
Surface Resistivity (10^x ohms/square): -
High Volt, Low Current Arc Resis (D495): -

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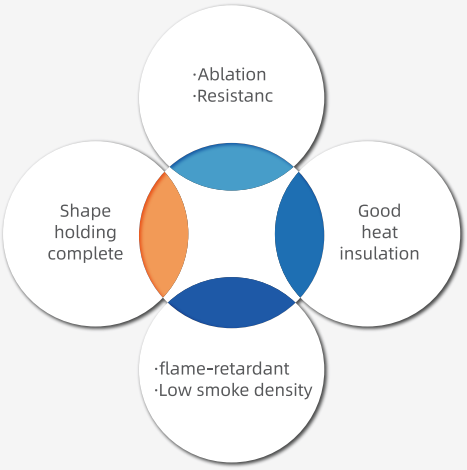
ABLATION-RESISTANT MATERIALS



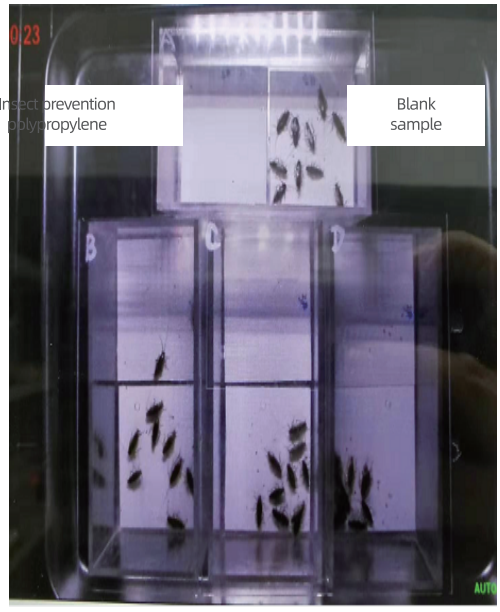




ABLATION-RESISTANT MATERIALS







Home appliances generate heat radiation due to the operation of electronic components, and the presence of numerous parts can attract cockroaches to hide inside. This not only damages circuits, leading to product failure, but in extreme cases, can also cause short circuits and potentially trigger fires.

PLASTIC REPLACING STEEL

WASHING MACHINE PULLEY







service life of plastic molds is 2-6 times longer than that of metal molds

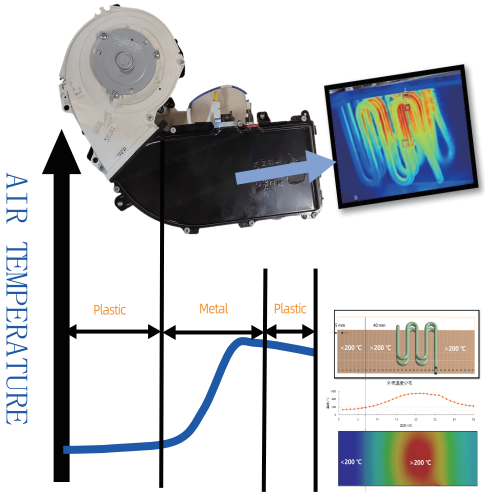
The cost of molds is reduced by 2-6 times

PA6-G65 offers:

·Superior creep resistance
·Excellent specific strength
·Ensures more reliable replacement of steel with plastic

WASHING MACHINE HOT AIR DUCT

COMPONENT	TEMP/°C	MATERIAL	REPLACING METAL
Volute Casing	~50	PET	SOP
Air Outlet	70-100	PPS、PET	SOP
Heating Tube Housing	120-150	PPS/PA66/PET	Developing



PLASTIC REPLACING COPPER

HIGH-TEMPERATURE NYLON - VALVE CORE/WATER CHANNEL



Six-way booster valve
Vicnyl 32G60HR



Manifold of water tap
Vicnyl® 62G50HR



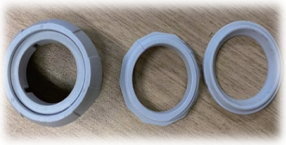
Thermostatic valve
Vicnyl 25G60



Thermostatic body
Vicnyl 25G60XF



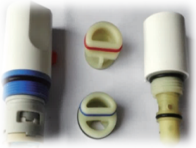
Fixing board, Hose fittings
Vicnyl® 62G40HR



Pipes Fittings
Vicnyl 62G40HR



Valve core
Vicnyl 25G60



Valve plug
Vicnyl 32G60HR



Housing water meter
Vicnyl 32G60HR

PPSU/PES - VALVE CORE/FOOD CONTACT





Pipe fitting



Water filter



Valve stem



Valve stem



Nursing bottle & cup



Infant feeding bowl



Food plate & Serving plate



Air fryer lid



Coffee machine component

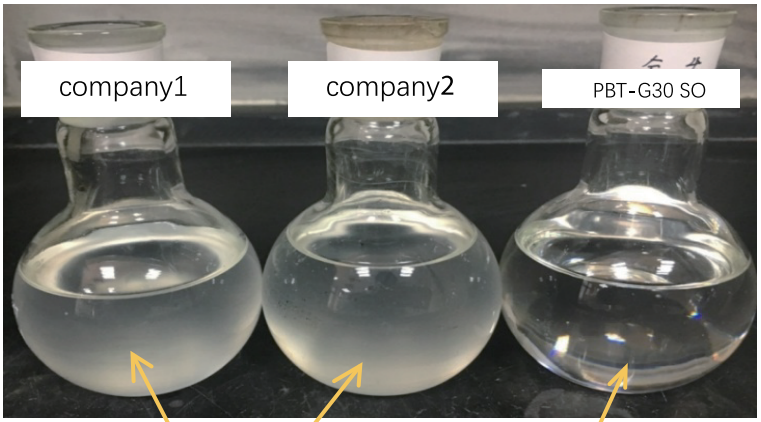
CHEMICAL RESISTANCE

SOLVENT-RESISTANT MATERIALS

Processing Environment							Household Living Environment										Medical Use
Test Material	99% cetic cid	KOH 30 wt%	ust Inhibitor	Release gent	Spark Oil	Ejector Pin Oil	DOA	DOP	nsecticide	Mosquito epellent	Cooking Oil	Gasoline	Fragrance	Baby Shampoo	70% Ethanol	3% Hydrogen Peroxide	6% Sodium Hypochlorite
ABS 121H	△(10 s)	●	●	●	●	●	△ (17 h)	△ (4 h)	△ (12 h)	△ (23 h)	○	○	△ (15 s)	△ (26 h)	○	●	●
ABS/	●	●	●	●	●	●	●	●	○	○	●	●	●	●	●	●	●

● excellent No change after 72 hours / ○ good Defects after 72 hours, but no damage/ △ poor Damage within 72 hours

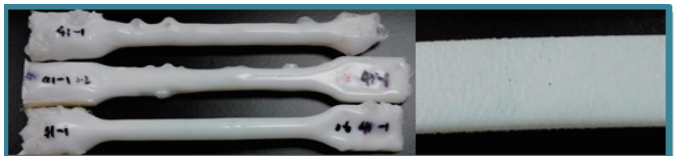
REFRIGERANT-RESISTANT MATERIALS







OIL/FOAMING AGENT-RESISTANT MATERIALS



Traditional Extruded HIPS:
Surface eroded after corro-sion testing



Kingfa HIPS Alloy:
Surface remains intact and in good condition after corrosion testing

COMPANY PROFILE OF KINGFA SCI. & TECH. CO., LTD.

Founded in 1993, Kingfa Sci. & Tech. Co., Ltd. is an advanced material enterprise focusing on the R&D, production, sales and service of advanced high-performance chemical materials, and providing advanced material solutions for creating a safer, more comfortable and more convenient life. Kingfa is committed to solving the increasingly severe environmental problems, actively responding to the challenges brought about by the changes in the global environment, and promoting the continuous improvement of living environment by balancing economic, environmental and social relations to achieve sustainable development and create a better life.

Based in Guangzhou Science City, Kingfa has established 56 subsidiaries across the world, and founded R&D and production bases in overseas regions including South Asia, North America, and Europe. The products of Kingfa mainly rely on independent innovation and development, covering eight categories with independent intellectual property rights including modified plastics, eco-friendly high-performance recycled plastics, fully biodegradable plastics, specialty engineering plastics, carbon fiber and composite materials, light hydrocarbon and hydrogen energy, styrene resins, medical and healthcare polymer materials, which are widely used in various industries including automobiles, household appliances, electrical and electronic components, communications, new infrastructure, new energy, modern agriculture, modern logistics, rail transit, aerospace, high-end equipment, medical and healthcare industries, establishing strategic partnership with numerous well-known enterprises around the world.

At present, Kingfa is one of the companies with the most complete product categories in global advanced chemical material industry. Kingfa is the largest modified plastics production company in the Asia-Pacific region with the most complete product range. For complete biodegradable plastics, specialty engineering plastics, carbon fiber and composite materials, Kingfa's technology and product quality has reached the international advanced level. At present, the company has formed four major business segments of modified plastics, advanced materials, green petrochemicals, and medical and health polymer materials. Relying on the international marketing service network, excellent operation system and collaborative innovation across the industrial chain, Kingfa will continue to invest in technological innovation to ensure the high-quality development.

Products are the foundation of market competition. In order to ensure the continuous innovation of products, with the R&D concept of "independent innovation, leading technology, and product superiority", relying on the support of National Recognized Enterprise Technology Center, National Engineering Laboratory, State Key Laboratory, and National Industrial Innovation Center, Kingfa has established the strategic "13551" R&D system, gradually forming a R&D platform driven by technology research, industry research, and product research.Kingfa continued to invest about 4.0% of its revenue in research and development. In 2022, Kingfa R&D expenses reached 1.453 billion yuan. The company adheres to the concept of "common endeavor, common growth, and common prosperity", and continues to innovate and improve the talent incentive mechanism to adapt to different stages of enterprise development. The value sharing concept has attracted a large number of outstanding talents. At present, the R&D team consists of 133 engineers with Ph.D. degree and 905 engineers with master degree, and has independently trained 1 Foreign Academician of Russian Academy of Engineering, 2 candidates for academicians and 5 experts with special allowance from the State Council.

Kingfa has accumulatively applied for 5401 domestic and foreign patents in total, including 3951 invention patents, 688 utility models, 34 appearance designs, 459 PCT patents and 269 foreign patents. The company has won 3 national scientific and technological progress second prizes, 15 scientific and technological progress awards at provincial and ministerial level, and 19 China Patent Awards (Excellent Award).

In line with China's "Belt and Road" initiative and dual circulation in domestic and overseas markets, Kingfa adheres to the strategic thinking of " Strengthen the middle, Consolidate both ends, Innovation-oriented, Leap-forward development", and strives to build a world-class R&D, marketing, manufacturing, and information platform to become a global leader in advanced materials, providing support for national strategic materials.

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