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NEW ENERGY VEHICLE ADHESIVE CATALOG



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ISO9001 International Quality Management System Certification
ISO14001 International Environmental Management System Certification



About Us



Huitian New Material (referred to as "Huitian"), with a stock code of 300041, is a leading high-tech enterprise group that specializes in researching, developing, and producing adhesives and new materials. With industrial bases and R&D centers in Shanghai, Guangdong, Suzhou, and Hubei, Huitian has a significant presence across China. Huitian is committed to quality and has received accreditation from ISO9001, ISO/TS16949 quality management system certification, and ISO14001 international environmental management system certification. Additionally, Huitian's products have been certified by reputable organizations such as SGS, TUV, IATF, JET, COC, GL, JG, UL, DIN, NSF, FDA, LFGB, and API. Huitian is a major supplier of adhesives and new materials in China, serving industries including photovoltaic, consumer electronics, power battery, automotive, construction, and packaging.

Huitian, established in 1977, is a pioneering scientific research institution focused on adhesive research and development. As one of the first market-oriented private high-tech adhesive enterprises, Huitian has developed a deep professional and technical expertise. It has earned recognition as both a provincial postdoctoral industrial base and a national postdoctoral research workstation. In collaboration with the Chinese Academy of Sciences, Huitian established the "Yinghua Huitian High Performance Adhesive Material Engineering Technology Center" in 2012 to create a world-class research and development center for adhesives.

Huitian is Vice President of China Adhesives Industry Association, member of China Fluorosilicone Organic Materials Industry Association, director of China Listed Companies Association. It has won a series of precious honors, such as National Torch Plan key high-tech enterprise, China Well-known Trademark, Top Ten most investment value in China Growth Enterprise Board, the first brand satisfied with Chinese adhesive products, top ten innovative material enterprises in China photovoltaic industry, patent pilot enterprise, honest tax paying unit and so on. Huitian has made significant contributions to society, having donated more than 20 million yuan and being awarded the "Outstanding Contribution Award for Chinese Philanthropy" twice in succession.

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Vision

Become the preferred expert for customers in adhesives and new materials
Bent on catching up with the world's advanced level

Mission

Industry Serves the Country, Repays the Society

Values

Customer-centric, Sriver-oriented
Long-term hard work and continuous self-criticism



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20 years of restructuring ¥ 4 billion annual sales 300 times growth

Huitian becomes the No.1 brand of adhesive in China

Forty years of refinement

The king is not born



1977

China's first professional adhesive research institute was established



1979

Independently researched and developed the first engine sealant to successfully replace Japanese product



1999

After the financial crisis in 1998, Huitian seize opportunity to lay out the Yangtze River Delta to establish Shanghai Huitian



2010

Huitian Landed on GEM becoming the first one to be listed in adhesive industry



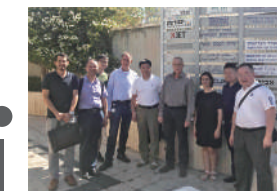
2012

Jointly established an engineering technology center with the Chinese Academy of Sciences



2013

New Shanghai headquarter and the brand new R&D center



2019

Establish overseas offices in Europe, America, Southeast Asia and other places to accelerate overseas expansion

ORIGIN 1977 ... **NEW BORN** 1997 ... **LAYOUT** 1998-2011 ... **CROSS** 2012-2015 ... **GLOBALIZATION** 2016-2022

1992

The institute is on the verge of bankruptcy



1997

The institute was successfully restructured, and employees competed for employment, moving towards rapid development



2004

Established Guangzhou Huitian and entered the field of electronic adhesives



2011

Established Changzhou Huitian Complete the layout of the photovoltaic field The birth of China's first autonomous backsheet



2015

Accredited the National Enterprise Technology Center jointly recognized by five national ministries and commissions



2017

Huitian Vietnam Yueyou Company was established to begin overseas expansion



2022

Start-up and expansion of production in Anhui, Guangzhou, Hubei, Yicheng



Largest adhesive R&D and manufacturer in China

- Six production bases in Shanghai, Guangzhou, Changzhou, Hubei and Yicheng covering an area of over 1,000,000 m²



Leading production equipment management system



World-leading 96 grade twin-screw 10,000-ton production line



100K-grade fully dust-free Solar backsheet production workshop



International leading polyurethane adhesive production line



Automation and informatization production management system



Strict implementation of lean production TPM and other norms



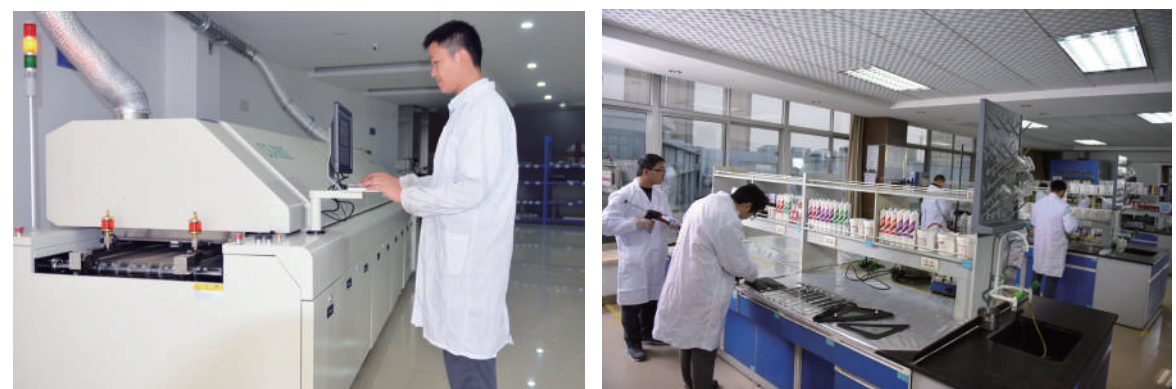
Quality supervision of the whole production process

Deep R&D strength

300+ R&D staffs 10+ scientists 30+ discipline leaders

5 R&D center 100+laboratories

R&D investment/revenue ratio nearly 5%



4 National-level New Products
 Responsible for 8 National Torch Programs
 Participate in the Formulation and Modification of 12 National or Industry Standards
 40+ certifications from authoritative institutions
 Passed 40 provincial scientific and technological achievements identification
 300+ innovative patents
 High-tech Enterprise in Shanghai, Guangdong, Hubei and Jiangsu



6 major industries, 6 major types of adhesives, 2000+ products

All-round adhesive solutions



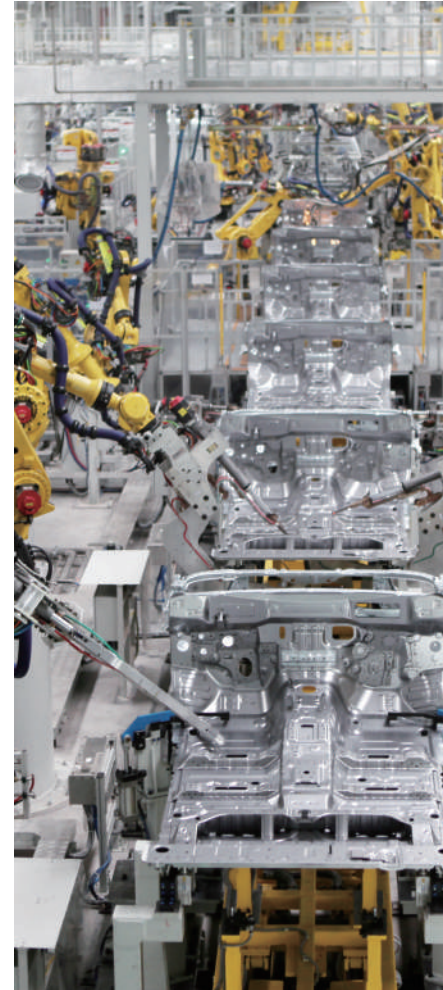
PV industry

Huitian adhesives power half of the world's photovoltaic cells



Electronics Industry

Comprehensive adhesive solution for the electronic industry



Automotive industry

Leading supplier of adhesives and chemicals in the power battery and automotive



Rail traffic

380km/h high-speed railway domestic strategic supplier



Construction industry

High-end construction adhesive and reliable choice for 600m height



Packaging industry

Provide more versatile, more reliable and more eco-friendly flexible packaging glue

Product catalog

Structural adhesive	8654 series
Thermal conductive adhesive	8656 series
	8658 series
	8659 series
	8646 series
Organosilicon	5284 series
	5294 series
	5270 series
Anode binder	PAA series
	SBR series
Conformal coating	PU system
	UV system
	Organosilicone system
Insulating film	Hot pressing insulating film

Structural adhesive

Product features

- ▶ Two-part formula; 1:1 Volumetric mixing ratio
- ▶ High strength; Good Toughness
- ▶ Excellent long-term aging performance; Durable bonding property
- ▶ Low wear and tear on gluing equipment
- ▶ Long open time for isocyanate

Typical applications

- ▶ Bonding between power battery cells
- ▶ Bonding between the power battery cell and the top and side plates
- ▶ Bonding between module and pack chassis, cell and pack chassis



Product performance

Product Name	8654series	
	8654	8654C
Features	High strength high toughness	Fast curing by heating High strength high toughness
Viscosity (mPa·s)	A:22000 B:20000	A:170000 B:170000
Volume ratio	1:1	1:1
Density after mixing (g/cm ³)	1.3	1.17
Operating time (min)	90	30
Cure type	Room temperature or heating	Room temperature or heating
Shear strength (Mpa)	12.5	10
Thermal conductivity (W/m·k)	0.4	0.25
Elongation at break (%)	100	100
Hardness (Shore D)	68	67

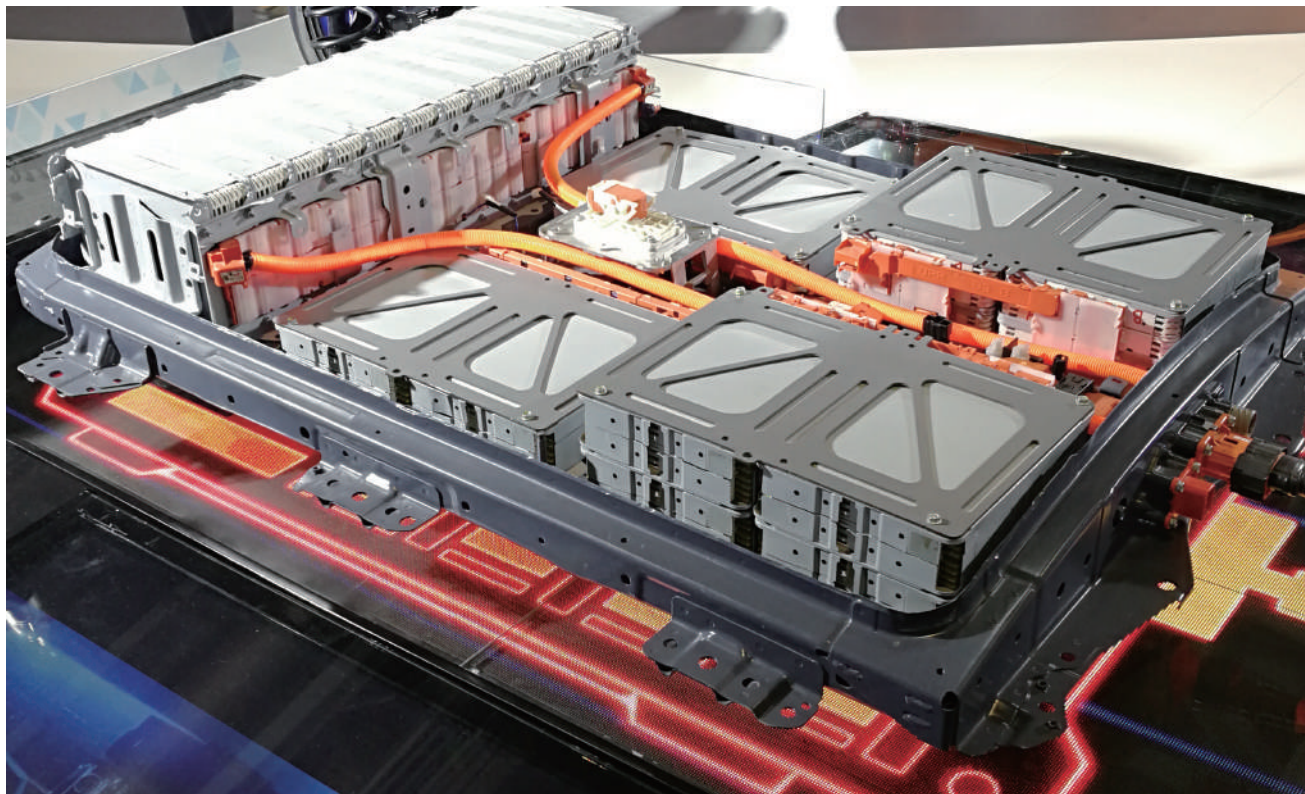
Thermal conductive adhesive

Product features

- ▶ Two-component formula, 1:1 volume mixing ratio
- ▶ High strength, good toughness
- ▶ Excellent long-term aging performance, long-lasting bonding
- ▶ High thermal conductivity and low density
- ▶ Low wear and tear on equipment
- ▶ Long open time for isocyanate

Typical applications

- ▶ Thermal conductive bonding between the battery cell and the module liquid cooling plate
- ▶ Thermal conductive bonding between the power battery module and the PACK liquid cooling plate



Product performance

Product name	8656 series	8658 series	8659 series	8646 series
Product features	High strength, high toughness	Medium thermal conductivity and high strength	Low density, high thermal conductivity	High thermal conductivity
Viscosity (mPa·s)	A:45000 B:38000	A:90000 B:110000	A:140000 B:130000	A:100000 B:60000
Volume ratio	1:1	1:1	1:1	1:1
Density after mixing (g/cm ³)	1.6	1.85	2.2	2.95
Operating time (min)	75	35	35	35
Cure type	Room temperature or heating	Room temperature or heating	Room temperature or heating	Room temperature or heating
Shear strength (MPa)	11	10	8	4
Thermal conductivity (W/m·K)	0.8	1.2	2.0	3.0
Elongation at break (%)	100	35	20	10
Hardness (Shore D)	70	68	70	60
Flame retardant class	V-0	V-0	V-0	V-0

Organosilicon adhesives series

Product features

- ▶ Can be cured at room temperature, or accelerating with high temperature
- ▶ Low viscosity, good operational processability
- ▶ High reliability under various aging conditions

Typical applications

- ▶ New energy vehicle battery heat conduction and potting
- ▶ Automotive electronic equipment
- ▶ Large energy storage device
- ▶ Communication Device board



Product performance

	Product name	Appearance	Viscosity (mPa·s)	Volume ratio	Density after mixing (g/cm ³)	Operating time (min)	Cure type	Shear strength (MPa)	Thermal conductivity (W/m·K)	Elongation at break (%)	Hardness (Shore D)	Packaging specifications
Potting adhesive series	5284	A:Grey fluid B:White fluid	A:2000-3500 Typical value:2800 B:1000-2500 Typical value:1800	1:1	≤1 Typical value:0.93	240	Room temperature curing	0.11	≤0.3 Typical value:0.245	≥100 Typical value:110	35A	15kg(16L)/Bucket
	5284LC	A:Blue-gray fluid B:White fluid	A:500-1500 Typical value:1000 B:500-1500 Typical value:750	1:1	≤0.7 Typical value:0.67	≥15 Typical value:20	Room temperature curing	0.11	≤0.2 Typical value:0.15	≥20 Typical value:80	11A	3.3kg(3L)/Bucket 33kg(50L)/Bucket
	5284LD	A:Light green fluid B:White fluid	A:4500-7500 Typical value:6500 B:6500-9500 Typical value:8800	1:1	≤0.55 Typical value:0.53	≥15 Typical value:18	Room temperature curing	--	≤0.2 Typical value:0.12	≥15 Typical value:25	27A	8.8kg(16L)/Bucket
	5294	A:Grey fluid B:White fluid	A:2000-6000 Typical value:3500 B:3000-7000 Typical value:4800	1:1	2.55-2.65 Typical value:2.58	≥30 Typical value:40	Addition-type curing	--	1.5	≥150 Typical value:170	15A	A/B 10L/Bucket
Thermal conductive adhesive series	5270	A:Green paste B:White paste	A:190000-290000 Typical value:240000 B:190000-290000 Typical value:250000	1:1	≤2.1 Typical value:2	≥75 Typical value:120	Room temperature curing	--	≥1.8 Typical value:1.95	≥50 Typical value:60	≤70 OO Typical value:50 OO	400ml/Cartridge 5 Gallon/Bucket 55 Gallon/Bucket
	5270LC	A:Black paste B:White paste	A:20000-80000 Typical value:30000 B:20000-80000 Typical value:29000	1:1	≤2.0 Typical value:1.95	30-90 Typical value:80	Room temperature curing	--	≥2.0 Typical value:2.1	≥100 Typical value:105	≤80 OO Typical value:54 OO	400ml/Cartridge



Anode binder-(PAA)

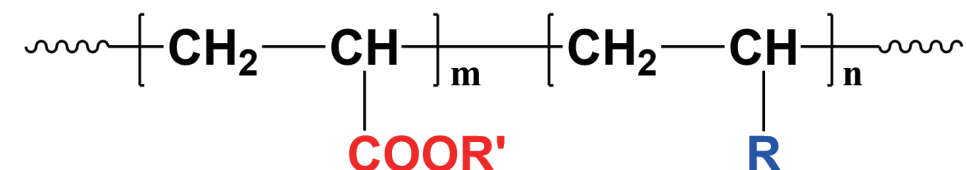
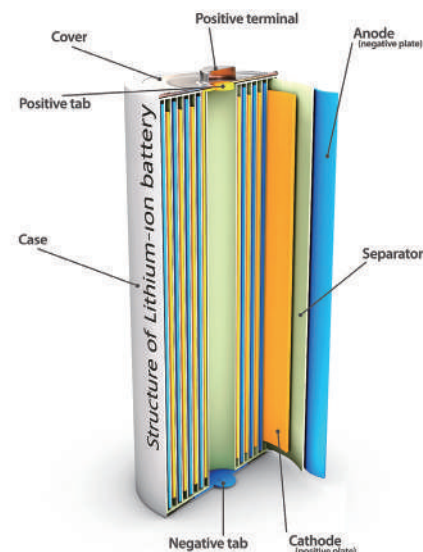
PAA cathode binder is a high molecular water-based adhesive made of acrylic acid, acrylate, and other vinyl monomers through free radical polymerization.

Product features

- ▶ Excellent pulp properties and stability
- ▶ Superior resistance to electrolyte swelling
- ▶ High bond strength, outstanding long cycle performance
- ▶ Effectively reduce battery DCR, improve dynamic performance, excellent low-temperature performance
- ▶ Effectively inhibit the expansion of the negative electrode and significantly increase the cycle life of the silicon/carbon negative electrode

Typical application

- ▶ Bonding of anode active materials (graphite, silicon-carbon materials) for lithium-ion secondary batteries
- ▶ Can be used for polarity pulp preparation (iron phosphate system)



Product performance

Product name	Appearance	Component	Solid content/wt%	PH	Viscosity/mPa·s	Product Features	Fields of use
1209	Light yellow viscous liquid	Acrylic acid derivative multipolymer	6	8.0±1.0	6000-20000	High bonding strength, Long cycle life, Excellent low-temperature performance	General power battery, Digital and Energy Storage Battery
1208	Light yellow viscous liquid	Acrylic acid derivative multipolymer	6	8.0±1.0	6000-20000	Excellent dynamic performance, Excellent multiplier performance	High energy density power battery, Multiplier battery

Anode binder-(SBR)

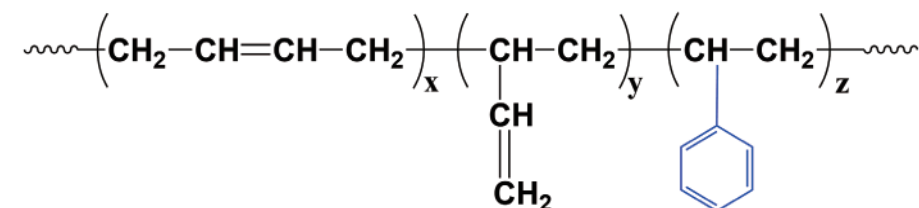
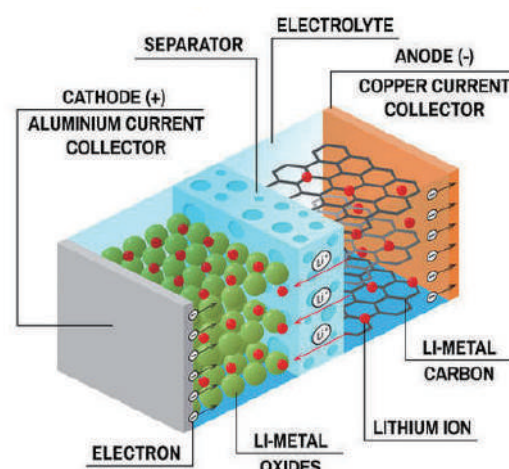
SBR cathode binder is a high molecular water-based adhesive made of butadiene, styrene and other vinyl monomers through free radical polymerization.

Product features

- ▶ Good bonding strength, flexibility and processability
- ▶ Resistant to electrolytes, low swelling of pole piece
- ▶ Effectively reduce battery DCR
- ▶ Improved battery low-temperature multiplier discharge performance
- ▶ Significantly extend battery cycle life

Typical application

- ▶ Bonding of anode active materials for lithium-ion secondary batteries
- ▶ Digital battery, energy storage battery, power battery
- ▶ 1223 is suitable for bonding silicon-carbon materials



Product performance

Product name	Appearance	Component	Solid content/wt%	PH	Viscosity/mPa·s	Particle size D50/nm	Product Features	Fields of use
1221	Milky liquid	Butadiene, styrene and other copolymers	48±2%	7.5±1.0	10-50	90±10	High bonding strength	Universal power batteries, digital and storage batteries
1222	Milky liquid	Butadiene, styrene and other copolymers	48±2%	7.5±1.0	10-50	160±10	Low internal resistance, Long cycle life, excellent low-temperature multiplier discharge performance	High performance power batteries digital and energy storage batteries
1223	Milky liquid	Acrylic acid, Butadiene, styrene and other copolymers	22±2%	7.5±1.0	50-150	330±10	High bonding strength, Long cycle life	Silicon carbon batteries

Conformal Coating

Polyurethane Coating



Product features

- ▶ High-performance modified polyurethane conformal coating with low odor, translucent, and flexibility. It is environmentally friendly and does not contain aromatic solvents. It provides excellent protection for electronic circuit boards, especially in high humidity environments. It has excellent adhesion to various types of substrates, a wide operating temperature range, excellent insulation properties, and good water-proof and moisture-proof performance. Additionally, it contains a fluorescent indicator for easy observation and testing.

Typical application

- ▶ Protection of circuit boards and various electronic components against water, moisture, dust, mildew, salt mist, insulation, etc.
- ▶ Mainly used in inverters, charging piles, inverters, automotive electronics, communication base stations, UPS power supply and other fields
- ◆ Diluent 1040
Colourless and translucent, quick volatile
- ◆ Cleaner 1050
Colourless and translucent, rapid curing type
- ◆ Reworking agent 1060
Colourless and translucent, high efficient type

Product performance

Name	Appearance	Solid content (W%)	Viscosity 25°C (mPa·s)	Surface dry time (min)	Cure time (min)	Surface resistance (Ohm/cm)	Flexibility	Temperature range (°C)	Reworkability
942201	Brown translucent	37±2	40	10-15min	24hrs(20°C) 4hrs(60°C) 2hrs(90°C)	>10 ¹³	<2mm	-65~130	
942202	Brown translucent	43±2	100	10-15min	24hrs(20°C) 4hrs(60°C) 2hrs(90°C)	>10 ¹³	<2mm	-65~130	
942203	Brown translucent	47±2	500	15-20min	24hrs(20°C) 4hrs(60°C) 2hrs(90°C)	>10 ¹³	<2mm	-65~130	These coatings can be cleaned during use with Cleaner 1050.
943201	Brown translucent	37±2	45	10-15min	24hrs(20°C) 4hrs(60°C) 2hrs(90°C)	>10 ¹³	<2mm	-65~130	Once cured, film can be removed with reworking agent 1060.
943202	Brown translucent	40±2	100	10-15min	24hrs(20°C) 4hrs(60°C) 2hrs(90°C)	>10 ¹³	<2mm	-65~130	
943203	Brown translucent	47±2	500	15-20min	24hrs(20°C) 4hrs(60°C) 2hrs(90°C)	>10 ¹³	<2mm	-65~130	

UV curing Coating



Product features

- ▶ This conformal coating is a one-component, UV-moisture dual-curing formula that does not contain solvents. It features a low viscosity, making it easy to spray and achieve fast curing speed. This product is economical and environmentally friendly, making it suitable for various spraying processes, including UV film coating and water curtain spraying. It offers excellent resistance to water, moisture, and chemical corrosion, as well as excellent electrical insulation performance. Additionally, it contains a fluorescent indicator for easy observation and detection.

Typical application

- ▶ Protection of circuit boards and various electronic components against water, moisture, dust, mildew, salt mist, insulation, etc., especially in harsh environment.
- ▶ Mainly used in intelligent home appliances, automotive electronics, consumer electronics 5G communication industrial control and other fields.
- ◆ Cleaner 1050
Colourless and translucent, rapid curing type
- ◆ Reworking agent 1060
Colourless and translucent, high efficient type

Product performance

Name	Appearance	Curing energy (J/cm ²)	Viscosity 25°C (mPa·s)	Curing method	Flash point (°C)	Surface resistance (Ohm/cm)	Flexibility	Temperature range (°C)	Reworkability
361216	Yellowish translucent	1~3	100	UV+ moisture cure	>90	>10 ¹⁴	<2mm	-65~135	
3612H3	Yellowish translucent	1~3	250	UV+ moisture cure	>90	>10 ¹⁴	<2mm	-65~135	These coatings can be cleaned during use with Cleaner 1050.
3612H6	Yellowish translucent	1~3	600	UV+ moisture cure	>90	>10 ¹⁴	<2mm	-65~135	Once cured, film can be removed with reworking agent 1060.
3612D6	Yellowish translucent	1~5	1100	UV+ moisture cure	>90	>10 ¹⁴	<2mm	-65~135	

Organosilicone Coating

Product features

► This one-component elastic-plastic organosilicon coating cures at room temperature and can also be accelerated by heating. It has a fast curing speed and medium viscosity, making it suitable for brushing, spraying, and dip coating. After curing, it forms a hard, transparent, and wear-resistant protective film that adheres well to various circuit boards. It offers excellent resistance to high and low temperatures and is flame retardant. Additionally, it contains a fluorescent indicator for easy detection and observation.



Typical application

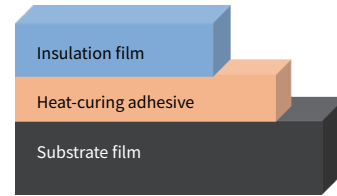
- Protection of circuit boards and various electronic components against water, moisture, dust, mildew, salt mist, insulation, etc.
 - Mainly used in the field of automotive electronics, lighting, power supply, etc.
- ◆ Diluent 1045
Colourless and translucent, good match processability

Product performance

Name	Appearance	Solid content (W%)	Viscosity 25°C (MPa·s)	Surface dry time (min)	Heat curing time (40-60°C)	Dielectric strength (KV/mm)	Volume resistivity (Ω·cm)	Temperature range (°C)	Flexibility	Reworkability
9415	Colourless and translucent	70	900	<20	<15min	≥16	≥10 ¹⁵	-60~200	<2mm	
9415LV	Colourless and translucent	40	900	<15	<10min	≥16	≥10 ¹⁵	-60~200	<2mm	Difficult / Physical Clearance
9415L	Colourless and translucent	50	300	<15	<10min	≥16	≥10 ¹⁵	-60~200	<2mm	
9416	Colourless and translucent	99	500	<7	<5min	≥16	≥10 ¹⁵	-60~200	<2mm	



Insulation film



Product features

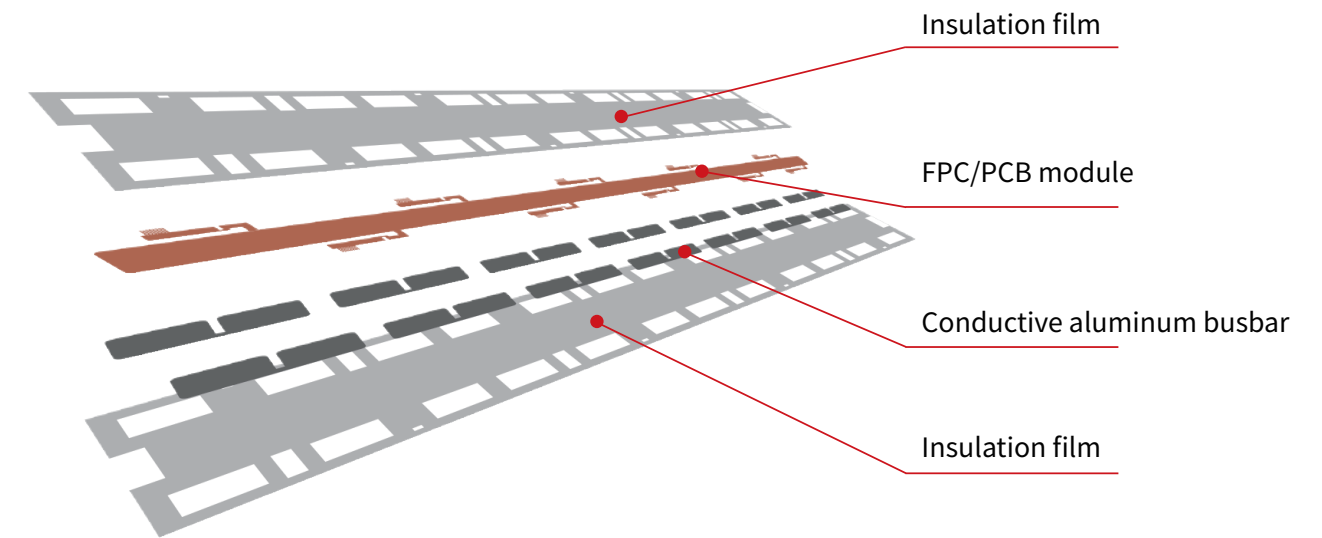
- ▶ This adhesive with special characteristics has excellent adhesion performance to metal and polymer materials
- ▶ Wide process window for multi-application and multi-discipline hot pressing technology
- ▶ Excellent weather resistance and stable bonding property in high and low temperature, high temperature and high humidity conditions also can ensure that the adhesive surface does not crack



Typical application

- ▶ Insulation protection for battery module side plates
- ▶ Isolation protection for battery module roof harness
- ▶ Isolation protection for battery module upper and lower panels

Hot pressing contact System



Product performance

Product name	Appearance	Hot pressing conditions	Insulation resistance (1000V DC, 60s)	Leakage current (3800V DC, 60s)	Breakdown voltage	180°Peel strength	Shear strength	Drawing strength	Tensile strength	Elongation at break	Thermal shrinkage rate	Flame retardant	Environment
TF6130D (single side) TF6130D-D (double side)	Black/White	Pressure:1~2Mpa Temperature:160℃ Time: 5min	≥10GΩ	≤1mA	≥12Kv	≥1.2N/mm	≥7Mpa	≥7Mpa	≥130Mpa	≥100%	≤1.0%	VTM-0	ROHS, ELV and REACH