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Your health, we defend

## BX Antibac

# 安全长效的抗菌防病毒解决方案

Safe and long-lasting antibacterial and anti-virus solutions

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# BX Antibac 简介

## Profile of BX Antibac

- BX Antibac 无机金属离子抗菌剂以亚微米级玻璃或磷酸锆为载体，以银离子、锌离子、铜离子为安全长效的抗菌防病毒活性成分。锌离子，铜离子是人体内存在且必要的元素，银离子对人体安全无害，它们通过干扰破坏细菌的细胞壁DNA或蛋白质，实现广谱抗菌效果，对含有蛋白质衣壳的各类病毒也有较好的抑制作用。
- 相对于有机类抗菌剂，具有更好的耐热性、长效释放性、化学稳定性和安全性。
- 无机金属离子抗菌剂可用于塑胶，橡胶，涂料，弹性体，纤维，无纺布，薄膜，板材，管材，陶瓷等几乎所有需要抗菌防病毒的领域。
- inorganic metal ion antibacterial agent uses sub-micron glass or zirconium phosphate as the carrier and silver ion, zinc ion and copper ion as the safe long-term antibacterial and anti-virus active ingredient. Zinc ion and copper ion are essential elements existing in human body, while silver ion is safe and harmless to human body. By interfering with the cell walls, DNA, or proteins of bacteria, they achieve a broad-spectrum antibacterial effect and have a good inhibitory effect on various viruses containing protein capsid.
- Compared with organic antibacterial agents, BX Antibac has better heat resistance, long-term release, chemical stability and safety.
- BX Antibac can be used in almost all the fields requiring anti-bacterial and anti-virus, such as plastics, rubber, coatings, elastomers, fibers, non-woven fabrics, films, plates, pipes, ceramics.

# BX Antibac 产品体系

## Product system of BX Antibac

BX Antibac 拥有丰富的产品体系，包括抗菌粉体、抗菌母粒、抗菌溶液、抗菌纤维和抗菌无纺布，可以应对不同材料、不同加工条件、不同应用场景的需求。

BX Antibac has a rich product portfolio, including antibacterial powder, antibacterial masterbatch, antibacterial liquid, antibacterial fiber and antibacterial non-woven fabric, which can meet the requirements of different materials, different processing conditions and different application scenarios.



银离子抗菌剂  
Silver ion antibacterial agent



锌离子抗菌剂  
Zinc ion antibacterial agent



铜离子抗菌剂  
Copper ion antibacterial agent



复合抗菌剂  
Compounding antibacterial agent



抗菌母粒  
Antibacterial masterbatch



抗菌溶液  
Antibacterial solution



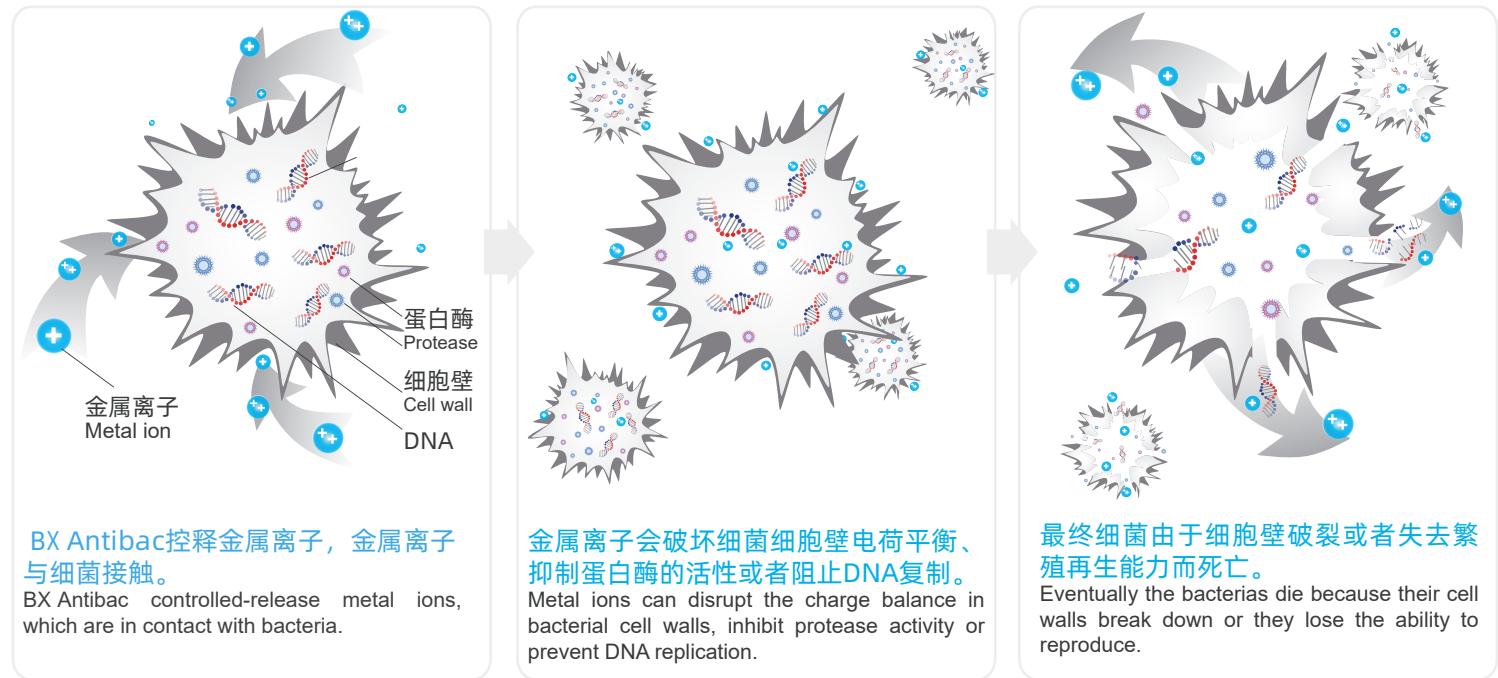
抗菌纤维  
Antibacterial fiber



抗菌无纺布  
Antibacterial non-woven fabric

# BX Antibac 抗菌机理

## Antibacterial Mechanism of BX Antibac



## BXAntbac产品特点

### Characteristic of BX Antibac



#### 高能效抗菌防病毒

- 广谱抗菌率99.9%
- 病毒灭活率99.9%

#### Highly effective antibacterial and anti-virus

- Broad-spectrum antibacterial rate is 99.9%
- Virus inactivation rate is 99.9%

#### 安全健康无刺激性

- 银铜锌离子对人体无害
- 不刺激皮肤，不产生耐药性

#### Safe and healthy without irritation

- Silver, copper and zinc ions are harmless to human body
- Does not irritate the skin or develop drug resistance

#### 长效抗菌防病毒

- 抗菌时效至少2年

#### Long-lasting anti-bacterial and anti-virus

- Antibacterial aging for at least 2 years

#### 稳定的加工性能

- 抗变色性能好
- 耐高温(600~1300°C)
- 在基材中分散均匀

#### Stable processing performance

- Good resistance to discoloration
- Resistance to high temperature (600 ~1300 °C)
- Disperse evenly in various substrates

#### 物性优势突出

- 粒径小，成本优势明显
- 透明度佳，应用面更广

#### Outstanding physical properties

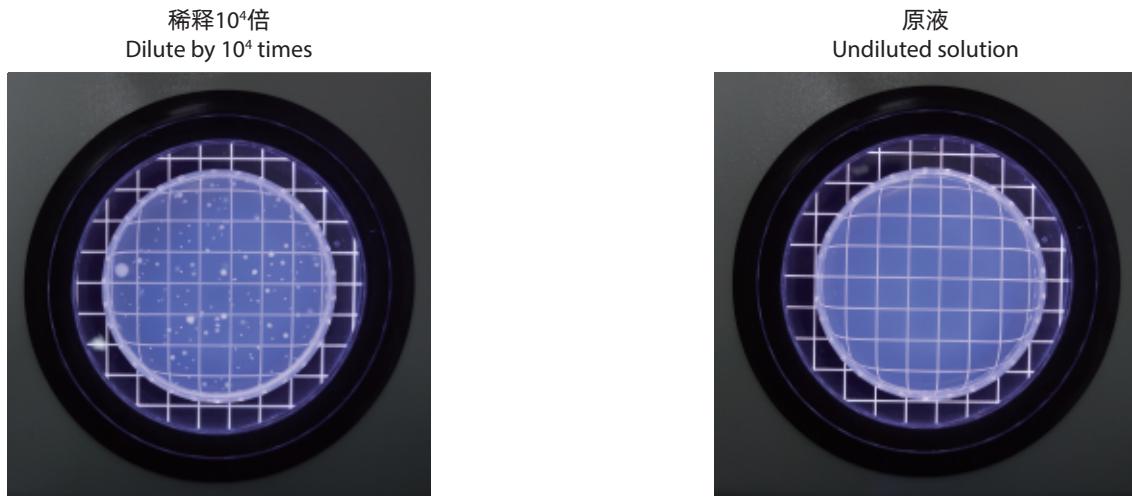
- Small particle size and obvious cost advantage
- Better transparency and wider applications

# BX Antibac的抗菌性能

## Antibacterial Properties of BX Antibac

BX Antibac抗菌剂对广谱微生物细菌具有明显的抑制效果。（测试标准：GB/T 21510-2008）

BX Antibac has obvious inhibitory effect on broad-spectrum microbial bacteria. (Test standard: GB/T 21510-2008 )



不添加抗菌剂的大肠杆菌培养基(培养24h)  
E. coli culture medium without antibacterial agent (culture for 24h)

大肠杆菌培养基中添加BX Antibac银离子抗菌剂(培养24h)  
BX Antibac silver ion antibacterial agent was added to e. coli culture medium(culture for 24h)

MIC是阻止细菌分裂、繁殖所需抗菌剂最小浓度，MIC数值越低对细菌的抗菌效果越好。

MIC is the minimum concentration of antibacterial agent required to prevent bacterial division and reproduction. The lower the MIC value, the better the antibacterial effect on bacteria.

各种微生物的最小抑制发育浓度(MIC) (琼脂稀释法)  
Minimum inhibitory concentration (MIC) of various microorganisms (AGAR dilution method)

单位(Unit): μg/mL

实验菌种 The experimental strains	性状 Character	BX Antibac银离子抗菌剂 Silver ion antibacterial agent
大肠杆菌0157 E. coli 0157	食物中毒 Food poisoning	500
大肠杆菌 E. coli	食物、饮料水污染 Water pollution of food and drink	500
金黄葡萄球菌 Staphylococcus aureus	化脓、败血症、食物中毒 Sepsis, food poisoning	500
沙门氏杆菌 Salmonella	伤寒、食物中毒 Typhoid fever, food poisoning	500
念珠菌 Candida	念珠菌症的病原性酵母 Pathogenic yeast of candidiasis	1000
黑曲霉菌 Aspergillus	住宅环境霉菌 Residential environment mold	1000

# BX Antibac 的病毒灭活性能

## Virus inactivating activity of BX Antibac

BX Antibac对HCoV-229E冠状病毒及H1N1流感病毒的灭活性能(银离子抗菌剂)  
 Virus inactivating activity of BX Antibac against HCOV-229E coronavirus and H1N1 influenza virus (Silver ion antibacterial agent)

试验病毒 The experimental virus	作用时间 Experimental time	组别 Group	平均病毒滴度对数值 Mean virus titer log value lgTCID50/mL	病毒总数 The total number of virus TCID50/mL	病毒灭活率 Virus inactivation rate (%)
HCoV-229E冠状病毒 HCoV-229E coronavirus	240min	对照组 Control group	4.22	$1.66 \times 10^4$	>99.99
		试验组 Experimental group	0.00	<10	
H1N1流感病毒 H1N1 influenza virus	24h	对照组 Control group	6.23	$1.70 \times 10^6$	>99.99
		试验组 Experimental group	0.92	<50	

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# BX Antibac的生物安全性

## Biosecurity of BX Antibac

BX Antibac抗菌剂已经通过各种生物安全性测试，确认具有非常高的安全性，可以放心在各种材料中添加使用。  
 BX Antibac antibacterial agent has been confirmed to have a very high level of safety through various biosafety tests and can be safely added to a variety of materials.

BX Antibac生物安全性试验结果  
 Biosafety test results of BX Antibac

试验项目 Test items	银离子抗菌剂 Silver ion antibacterial agent	锌离子抗菌剂 Zinc ion antibacterial agent
急性经口毒性(ICR小鼠) Acute transoral toxicity (ICR mice)	$LD_{50} > 5000 \text{mg/kg}$ 无毒Nontoxicity	$LD_{50} > 5000 \text{mg/kg}$ 无毒Nontoxicity
多次皮肤刺激性(新西兰兔) Multiple skin irritation (New Zealand rabbits)	无刺激 Nonirritant	无刺激 Nonirritant
急性眼刺激性(新西兰兔) Acute eye irritation (New Zealand rabbits)	无刺激 Nonirritant	无刺激 Nonirritant

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# BX Antibac在塑料中的应用性能

## Performance of BX Antibac in plastic

BX Antibac 在塑料中的抗菌性能  
Antibacterial properties of BX Antibac in plastics

测试样品 Test sample	试验菌种 Test strains	$U_0$	$U_t$	$A_t$	R	抗菌率Antibacterial ratio %
PP+银离子抗菌剂 PP+Silver ion antibacterial agent	大肠杆菌ATCC 8739 E. coli ATCC 8739	4.19	5.92	-0.20	6.1	>99.99
	金黄色葡萄球菌ATCC 6538P Staphylococcus aureus ATCC 6538P	4.23	5.58	-0.20	5.8	>99.99
PP+锌离子抗菌剂 PP+Zinc ion antibacterial agent	大肠杆菌ATCC 8739 E. coli ATCC 8739	4.19	5.92	1.74	4.2	>99.99
	金黄色葡萄球菌ATCC 6538P Staphylococcus aureus ATCC 6538P	4.23	5.58	1.52	4.1	>99.99
PP+铜离子抗菌剂 PP+Copper ion antibacterial agent	大肠杆菌ATCC 8739 E. coli ATCC 8739	5.23	5.66	3.08	2.6	>99
	金黄色葡萄球菌ATCC 6538P Staphylococcus aureus ATCC 6538P	5.11	5.38	2.56	2.8	>99

GB/T 31402-2015/ISO 22196:2007  
 $U_0$ ——空白样0接触时间菌数的对数平均值 Logarithmic mean of bacteria number in 0 exposure time of blank sample(CFU/cm<sup>2</sup>)  
 $U_t$ ——空白样24h接触时间菌数的对数平均值 Logarithmic mean of bacteria number in 24h of blank sample(CFU/cm<sup>2</sup>)  
 $A_t$ ——测试样24h接触时间菌数的对数平均值 Logarithmic mean of bacteria number in 24h of test sample(CFU/cm<sup>2</sup>)  
R——抗菌性能值 Antimicrobial activity value

BX Antibac在塑料中的病毒灭活性能  
Virus inactivating activity of BX Antibac in plastic

试验病毒 The experimental virus	作用时间 Experimental time	组别 Group	平均病毒滴度对数值 Mean virus titer log value lgTCID <sub>50</sub> /mL	病毒总数 The total number of virus TCID <sub>50</sub> /mL	病毒灭活率 Virus inactivation rate (%)
H1N1流感病毒 H1N1 influenza virus	24h	对照组:PP Control group:PP	6.12	$1.32 \times 10^6$	>99.99
		试验组:PP+银离子抗菌剂 Experimental group:PP+Silver ion antibacterial agent	1.34	<50	
	24h	对照组:PP Control group:PP	6.12	$1.32 \times 10^6$	>99.9
		试验组:PP+锌离子抗菌剂 Experimental group:PP+Zinc ion antibacterial agent	2.60	$3.98 \times 10^2$	

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BX Antibac抗菌剂具有优异的抗加工变色性能，且在透明度方面有独特的优势。

BX Antibac抗菌剂几乎适用于所有塑料基材，添加后的抗菌性能依然出众。

BX Antibac has excellent resistance to process discoloration and unique advantages in transparency.

BX Antibac is suitable for almost all plastic substrates, and its antibacterial properties are still outstanding.

# BXAntibac在塑料中的应用

## Applications of BX Antibac in plastic

BX Antibac抗菌剂/母粒与PP、PE、ABS、硅胶等橡塑材料直接混合，通过高温热压成型或注塑等加工方式得到抗菌 制件，可用于日用消费品、穿戴用品、电子产品、汽车内饰、家电产品等，实现产品的品质提升和健康升级。

BX Antibac antibacterial agent/masterbatch can be directly mixed with rubber and plastic materials such as PP, PE, ABS, silicone rubber to obtain antibacterial products by hot pressing or injection molding. They can be used for consumer goods, wearable products, electronic products, automotive interiors, household appliances and other products to realize product quality improvement and health upgrade.



抗菌米桶 (PP)  
Antibacterial rice box (PP)



抗菌水箱 (AS)  
Antibacterial water tank (AS)



抗菌鼠标壳 (ABS)  
Antibacterial mouse shell (ABS)



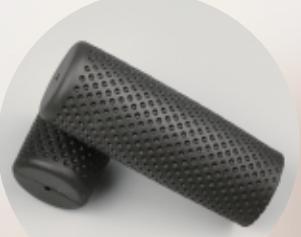
抗菌皮革 (PU)  
Antibacterial leather (PU)



抗菌表带 (硅胶)  
Antibacterial strap (silicone)



抗菌车轮 (TPR)  
Antibacterial wheels (TPR)



抗菌自行车把手 (TPE)  
Antibacterial bicycle handlebars (TPE)



抗菌通风管 (PE)  
Antibacterial ventilation duct (PE)



抗菌人工草坪 (PA, PP, PE)  
Antibacterial artificial lawn (PA, PP, PE)

# BX Antibac 在纤维纺织品中的应用性能

## Performance of BX Antibac in fibre textile

BX Antibac抗菌涤纶织物水洗50次后的抗菌性能（银离子抗菌剂）  
 Antibacterial properties of BX Antibac antibacterial polyester fabric washed 50 times (silver ion antibacterial agent)

试验菌种 Test strains	对照样起始菌量 Initial bacteria number of control sample (CFU/mL)	对照样18h后菌量 Bacteria number after 18h of control sample (CFU/mL)	测试样18h后菌量 Bacteria number after 18h of experimental sample (CFU/mL)	抑菌率 Antibacterial rate %
白色念珠菌 ATCC10231 Candida albicans ATCC10231	$1.8 \times 10^4$	$7.3 \times 10^5$	$1.3 \times 10^5$	82
大肠杆菌 8099 E. coli 8099	$2.3 \times 10^4$	$1.9 \times 10^7$	$1.1 \times 10^5$	>99
金黄色葡萄球菌 ATCC 6538 Staphylococcus aureus ATCC 6538	$2.2 \times 10^4$	$1.7 \times 10^6$	$7.2 \times 10^3$	>99

抗菌测试标准 Antimicrobial test standard: FZ/T 73023-2006

BX Antibac抗菌棉纤维水洗50次后的抗菌性能（银离子抗菌整理液）  
 Antibacterial properties of BX Antibac antibacterial cotton fibers washed 50 times (silver ion antibacterial finishing solution)

试验菌种 Test strains	对照样起始菌量 Initial bacteria number of control sample (CFU/mL)	对照样18h后菌量 Bacteria number after 18h of control sample (CFU/mL)	测试样18h后菌量 Bacteria number after 18h of experimental sample (CFU/mL)	抑菌率 Antibacterial rate %
白色念珠菌 ATCC10231 Candida albicans ATCC10231	$1.8 \times 10^4$	$8.2 \times 10^5$	$7.4 \times 10^4$	91
大肠杆菌 8099 E. coli 8099	$2.3 \times 10^4$	$2.1 \times 10^7$	$1.2 \times 10^5$	>99
金黄色葡萄球菌 ATCC 6538 Staphylococcus aureus ATCC 6538	$2.1 \times 10^4$	$1.6 \times 10^7$	$5.0 \times 10^4$	>99

抗菌测试标准 Antimicrobial test standard: FZ/T 73023-2006

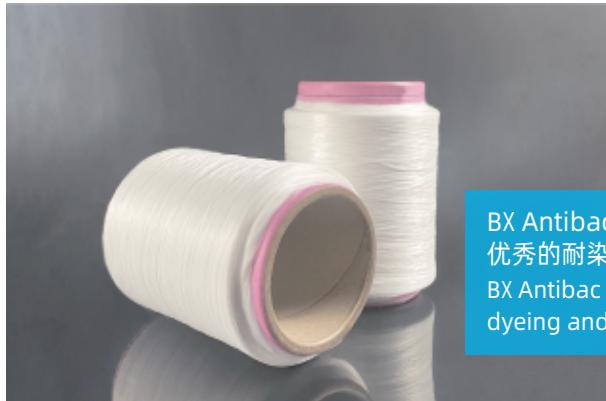
BX Antibac抗菌纤维纺织品具有优异的抑菌效果，且在水洗50次后满足AAA级产品抑菌指标要求。

BX Antibac antibacterial fiber textile has excellent antibacterial effect and meets AAA level antimicrobial specifications after washing for 50 times.

BX Antibac抗菌无纺布对H1N1流感病毒的灭活性能（银离子抗菌剂）  
 Virus inactivating activity of BX Antibac antibacterial non-woven fabric against H1N1 influenza virus (silver ion antibacterial agent)

试验病毒 The experimental virus	作用时间 Experimental time	组别 Group	平均病毒滴度对数值 Mean virus titer log value lgTCID50/mL	病毒总数 The total number of virus TCID50/mL	病毒灭活率 Virus inactivation rate (%)
H1N1流感病毒 H1N1 influenza virus	24h	对照组 Control group	6.80	$6.31 \times 10^7$	>99.99
		试验组 Experimental group	2.54	$3.46 \times 10^3$	

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BX Antibac物理化学性能十分稳定，在纤维纺织品加工过程和使用过程都具有优秀的耐染色和耐水洗性能。

BX Antibac is very stable in physical and chemical properties, and has excellent dyeing and washable resistance during fiber textile processing and application.

# BX Antibac 在纤维纺织品中的应用

## Applications of BX Antibac in fibre textile

BXAmbac独特的小粒径纺丝级抗菌剂，具有优秀的可纺性，可用于抗菌长纤、抗菌短纤、抗菌纱线等产品的加工，也可以直接用于无纺布和熔喷布的织造；BX Antibac抗菌纤维、抗菌纱线可用于毛毯、抹布、面料等产品的编织；BX Antibac抗菌整理液可以直接用于成品窗帘、毛毯、抹布等纺织品的后整理过程。

BX Antibac unique small size spinning grade antibacterial agent, with excellent spinnability, can be used for the processing of antibacterial long fiber, antibacterial staple fiber, antibacterial yarn, etc., and can also be directly used for the weaving of non-woven fabrics and melt-blown fabrics; BX Antibac antibacterial fiber and antibacterial yarn can be used for weaving blankets, rags, clothing and other products; BX Antibac antibacterial finishing solution can be directly used in the finishing process of finished fabrics such as curtains, blankets and rags.



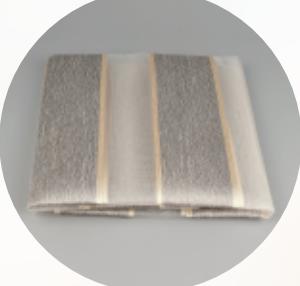
抗菌口罩 (PP)  
Antibacterial facemasks (PP)



抗菌针织物 (PET, PA)  
Antibacterial knitted fabric (PET, PA)



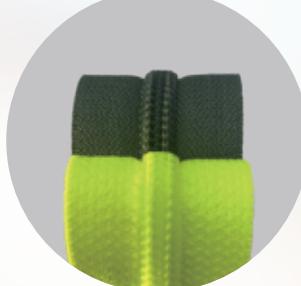
抗菌抹布 (PET, PA)  
Antibacterial rags (PET, PA)



抗菌窗帘 (PET)  
Antibacterial curtains (PET)



抗菌毛毯 (PET, PA)  
Antibacterial blankets (PET, PA)



抗菌拉链 (PET, PA)  
Antibacterial zippers (PET, PA)



抗菌面料 (PET, PA)  
Antibacterial fabric (PET, PA)



抗菌吸湿排汗面料 (PET)  
Antibacterial hygroscopic and sweat-wicking fabric (PET)



抗菌袜 (PET)  
Antibacterial stockings (PET)

# BX Antibac在透明材料中的应用

## Applications of BX Antibac in transparent plastic

· BX Antibac高透抗菌剂能较好地维持透明基材的透明度，可根据基材来匹配透明度，具有良好的抗加工变色能力，解决了常规抗菌剂在加工时易黄变、雾度高、透明度下降等问题。

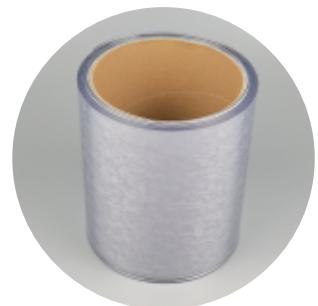
· BX Antibac high transparency antibacterial agent can maintain the transparency of transparent substrate, and can match transparency according to the substrate, has good resistance to processing discoloration, solving the problems such as yellowing, high fogging and decreasing transparency.



透明包装壳 (PET)  
Transparent packing case (PET)



透明手机壳(TPU)  
Transparent mobile phone shell (TPU)



透明门帘 (PVC)  
Transparent curtain (PVC)

# BX Antibac 在涂层材料中的应用

## Application of BX Antibac in coating material

BX Antibac抗菌剂具有良好的分散性，广泛用于涂料、油墨、油漆等涂层材料中，通过表面涂层的方式赋予产品抗菌性。

BX Antibac antibacterial agent has good dispersity and is widely used in coatings, inks, paints and other coating materials, imparting antibacterial properties to products by means of surface coating.



抗菌陶瓷 (釉料涂层)  
Antibacterial ceramics (glaze coating)



抗菌纸盒(油墨涂层)  
Antibacterial paper box (ink coating)



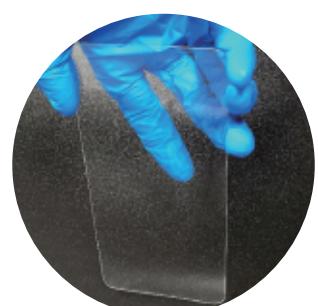
抗菌金属板 (烤漆涂层)  
Antibacterial plate metals (baking paint coating)



抗菌地板 (UV光油)  
Antibacterial floor (UV curable varnish)



抗菌透明膜(UV涂层)  
Antibacterial transparent film (UV coating)



抗菌钢化膜 (涂层)  
Antibacterial toughened film (coating)

# BX Antibac 在餐具中的应用

## Applications of BX Antibac in tableware

- BX Antibac 抗菌剂在餐饮具领域有成熟的应用解决方案，已经验证能够抑制、杀灭多种有害人体健康的细菌及病毒，例如大肠杆菌，金黄色葡萄球菌，鼠伤沙门氏菌，油门螺旋杆菌，HINI流感病毒等。
- 在安全性方面，BX Antibac抗菌餐具方案符合国家食品接触材料相关规定。
- BX Antibac has been proven to inhibit and kill a wide range of bacteria and viruses that are harmful to human health, such as Escherichia coli, Staphylococcus aureus, Salmonella murine, Helicobacter thottle, and Influenza VIRUS HINI.
- In terms of safety, BX Antibac antibacterial tableware solutions comply with national regulations on food contact materials.



抗菌食品容器 (PP)  
Antibacterial food container (PP)



抗菌菜板 (PP, PE)  
Antibacterial cutting board (PP, PE)



抗菌筷子 (PET, PPS)  
Antibacterial chopsticks (PET, PPS)

# BX Antibac在鞋材中的应用

## Application of BX Antibac in shoes material

· BX Antibac 抗菌剂/母粒直接加入到EVA、TPU等塑料基材中，加工成型得到抗菌鞋材，例如拖鞋、皮鞋人造革等。  
· BX Antibac antibacterial agent/masterbatch is directly added to EVA, TPU and other plastic substrate to produce antibacterial footwear materials, such as slippers, leather shoes and artificial leather.



皮鞋人造革 (PU, PVC等)  
Leather (PU, PVC, etc.)



鞋垫主材 (TPU, EVA等)  
Insole material (TPU, EVA, etc.)



运动鞋面料、里料等 (PA, PET等)  
Sneaker fabric and sneaker lining (PA, PET, etc.)

· BX Antibac 抗菌整理液可以直接用于鞋子面料、里料的抗菌处理；  
· BX Antibac 抗菌纱线可用于鞋面材料、鞋子里料、鞋垫材料的编织。  
· BX Antibac antibacterial finishing solution can be directly used for the antibacterial treatment of shoe fabric and lining;  
· BX Antibac antibacterial yarn can be used for the weaving of vamp materials, shoe lining materials and insole materials.

# BX Antibac 的应用领域

## Application fields of BX Antibac

应用领域 Application fields	典型应用 Typical applications
纤维 Fiber	服装类(内衣、袜子、衬衫、罩衫、医护服装、制服、工作服等)、床上用品(床单、被褥等)、口罩、手套、泳衣、帽子、手帕、毛巾、抹布、窗帘、地毯 Clothing (underwear, socks, shirts, blouses, medical clothing, uniforms, work clothes, etc.), Bedding (sheets, bedding, etc.), Masks, Gloves, Swimsuits, Hats, Handkerchiefs, Towels, Rags, Curtains, Carpets, etc.
日用品 Daily Necessities	厨房用具 (清洗台、海绵洁布、碗刷、水漏、案板等) 洗面用具 (梳子、发刷、剃须刀柄、杯子、牙刷等) 浴室用具 (洗脸盆、浴缸、淋浴手柄等) 、衣架、雨伞、雨披、垃圾箱、拖鞋 Kitchen utensils (washing table, sponge cleaning cloth, bowl brush, water leak, chopping board, etc.), Washing utensils (comb, hair brush, razor handle, cup, toothbrush, etc.), Bathroom utensils (washbasin, bathtub, shower handle, etc.), Hanger, Umbrella, Poncho, Dustbin, Slippers, etc.
皮革 Leatherwear	鞋、鞋垫、手套、皮带、表带、皮革包、椅子、吊带 Shoes, Insoles, Gloves, Belts, Watch belts, Leather bags, Chairs, Suspenders, etc.
水处理 Water Treatment Appliances	水槽、水管、软管、冷却塔、自动售货机用配管 Piping for water tank, Water pipe, Soft camp, Cooling tower, Vending machine, etc.
家电制品 Household Appliances	空调过滤器、换气扇、空气清洁机、加湿器、被褥干燥机器、洗衣机、吸尘器、洗碗机、冰箱、电饭锅、热水器、自动咖啡机、手机、传真机、电脑、录像机、录音机、摄像机、磁带、录像带 Air conditioning filter, Ventilator, Air cleaner, Humidifier, Bedding drying machine, Washing machine, Vacuum cleaner, Dishwasher, Refrigerator, Rice cooker, Water heater, Automatic coffee machine, Mobile phone, Fax machine, Computer, Video recorder, Recorder, Video camera, Tape, Video tape, etc.
运动制品 Sports Appliances	运动器械、运动服、手套、运动鞋(高尔夫、滑雪、雪橇、网球等)、防风外套 Sports equipment, Sportswear, Gloves, Sports shoes (golf, skiing, sledge, tennis, etc.), Windproof coat, etc.
玩具 Toys	偶人、布娃娃、纸浆、折纸、障碍球、拼图、游戏机 Puppet, Doll, Pulp, Origami, Obstacle ball, Puzzle, Game machine, etc.
卫生医疗 Health Care Appliances	病床、石膏、手术服、包扎带、创可贴、医用敷料 Hospital bed, Plaster, Surgical suit, Bandage, Band aid, Medical dressing, etc.
化妆品 Cosmetics	化妆品容器、粉底 Cosmetic containers, Foundation, etc.
建筑材料 Building Appliances	住宅设备壁纸、草垫、洗面台、厨台、瓷砖、卫生陶器 Wallpaper, Straw mat, Washstand, Kitchen stand, Ceramic tile, Pottery, etc.
土木 Civil Appliances	涂料、填缝材、灰泥、沙坑 Coating, Joint filler, Plaster, Sand pit, etc.
纸制品 Papers	纸尿裤、卫生纸、卫生巾、湿巾 Diapers, Toilet paper, Sanitary napkins, Wipes, etc.

# BX Antibac产品目录

## Product list of BX Antibac

产品类型 Product type	产品型号 Product Model	载体/组分 Carrier/Component	抗菌活性成分 Antibacterial active ingredients	粒径 Particle size (μm)	耐温性 Temperature resistance(°C)	适用范围及推荐添加量 Applicable scope and recommended dosage(%)					
						塑料 Plastic	橡胶 Rubber	涂料/油墨 Coating/Ink	膜材 Film	纤维/无纺布 Fiber/Non-woven fabrics	陶瓷 Ceramic
银离子抗菌剂 Silver ion antibacterial agent	S203	磷酸锆 Zirconium phosphate	银离子 Silver ion	D <sub>50</sub> =0.6±0.2 D <sub>98</sub> =1.0±0.2	1300	—	—	1.0-2.0	1.0-2.0	1.0-2.0	6.0-8.0
	S205	磷酸锆 Zirconium phosphate	银离子 Silver ion	D <sub>50</sub> =0.6±0.2 D <sub>98</sub> =1.0±0.2	1300	—	—	0.5-1.0	0.5-1.0	0.5-1.0	3.5-5.0
	S210	磷酸锆 Zirconium phosphate	银离子 Silver ion	D <sub>50</sub> =0.6±0.2 D <sub>98</sub> =1.0±0.2	1300	—	—	0.3-0.5	0.3-0.5	0.3-0.5	1.5-2.5
	S110	玻璃 Glass	银离子 Silver ion	D <sub>50</sub> =3.5±1 D <sub>98</sub> =9±2	600	0.3-2.0	0.6-3.0	0.5-1.0	0.5-1.5	—	—
	S130	玻璃 Glass	银离子 Silver ion	D <sub>50</sub> =11±3 D <sub>98</sub> =50±5	600	0.3-2.0	0.6-3.0	0.5-1.0	0.5-1.5	—	—
锌离子抗菌剂 Zinc ion antibacterial agent	Z201	玻璃 Glass	锌离子 Zinc ion	D <sub>50</sub> =0.4±0.2 D <sub>98</sub> =5±2	600	0.3-2.0	0.6-3.0	0.3-2.0	0.5-1.5	—	6.0-8.0
	Z210	玻璃 Glass	锌离子 Zinc ion	D <sub>50</sub> =3.5±1 D <sub>98</sub> =9±2	600	0.3-2.0	0.6-3.0	0.3-2.0	0.5-1.5	—	6.0-8.0
	Z230	玻璃 Glass	锌离子 Zinc ion	D <sub>50</sub> =8±3 D <sub>98</sub> =42±5	600	0.3-2.0	0.6-3.0	0.3-2.0	0.5-1.5	—	6.0-8.0
铜离子抗菌剂 Copper ion antibacterial agent	C401	玻璃 Glass	铜离子 Copper ion	D <sub>50</sub> =0.4±0.2 D <sub>98</sub> =5±2	600	0.5-2.5	0.6-3.0	0.5-1.5	—	—	—
	C410	玻璃 Glass	铜离子 Copper ion	D <sub>50</sub> =3.5±1 D <sub>98</sub> =9±2	600	0.5-2.5	0.6-3.0	0.5-1.5	0.5-2.0	—	—
	C430	玻璃 Glass	铜离子 Copper ion	D <sub>50</sub> =11±3 D <sub>98</sub> =52±5	600	0.5-2.5	0.6-3.0	0.5-1.5	0.5-2.0	—	—
复合抗菌剂 Compounding antibacterial agent	B210T	复合磷酸锆 zirconium phosphate	银离子 Silver ion 氧化钛 Titanium oxide	D <sub>50</sub> =0.6±0.2 D <sub>98</sub> =1.0±0.2	1300	—	—	1.0-2.0	1.0-1.2	1.0-1.2	6.0-8.0
	B210	复合磷酸锆 zirconium phosphate	银离子 Silver ion 锌离子 Zinc ion	D <sub>50</sub> =0.6±0.2 D <sub>98</sub> =1.0±0.2	1300	—	—	1.0-2.0	1.0-1.2	1.0-1.2	6.0-8.0
高透抗菌剂 High transparency antibacterial agent	T系列	玻璃 Glass	银离子 Silver ion 锌离子 Zinc ion	D <sub>50</sub> =3.5±1 D <sub>98</sub> =9±2	600	主要应用于TPU、PET、ABS、PC、PVC、PS等透明基材，推荐添加量：0.5% -1.5% Mainly used in transparent substrate, such as TPU, PET, ABS, PC, PVC, PS, etc., recommended dosage: 0.5% -1.5%					
抗菌溶液 Antibacterial solution	LB201	水或醇类, 抗菌剂 Water or alcohol, antibacterial agent	锌离子 Zinc ion	D <sub>50</sub> =0.4±0.2 D <sub>98</sub> =1.2±0.5	—	主要用于涂料/油墨或原位合成纺丝，推荐添加量：4%-8% Mainly used for coatings/inks or in situ synthetic spinning, recommended dosage: 4%-8%					
	LB401	水或醇类, 抗菌剂 Water or alcohol, antibacterial agent	铜离子 Copper ion	D <sub>50</sub> =0.4±0.2 D <sub>98</sub> =1.2±0.5	—	主要用于消毒、杀菌产品，推荐用纯水稀释50倍后使用 Mainly used for disinfection and sterilization products, recommended to dilute 50 times with pure water before use					
	L1000	有机聚合物 Organic polymers	络合银离子 Complexed silver ion	—	—	主要用于纺织品后整理，在纺织品中的推荐添加量：1%-5%(o.w.f) Mainly used for textiles finishing, recommended dosage to textiles: 1%-5%(o.w.f)					
	L1003	有机聚合物 Organic polymers	络合银离子 Complexed silver ion	—	—	主要用于纺织品后整理，在纺织品中的推荐添加量：1%-5%(o.w.f) Mainly used for textiles finishing, recommended dosage to textiles: 1%-5%(o.w.f)					