

# WANWEI Company PRODUCT MANUALS

皖维集团 打造行业世界一流企业

|产|品|手|册|●



ANHUI WANWE GROUP CO., LTD.





# 企业简介 WANWEI COMPANY PROFILE

安徽皖维集团有限责任公司系安徽省国有资产监督管理委员会管辖的大型企业。前身是安徽省维尼纶厂,始建于1969年,为"四五"期间投资建设的重点项目。集团公司下辖6家子公司,核心子公司安徽皖维高新材料股份有限公司于1997年5月在上海证券交易所上市(股票名称为皖维高新,代码为"600063")。

皖维集团是安徽省重要的化工、化纤、新材料联合制造企业,总资产超100亿元,年销售收入70多亿元,进出口额超1亿美元。集团具有年产35万吨聚乙烯醇(PVA)、60万吨VAC、12万吨精 酸甲酯、50万吨电石、4万吨高强高模PVA纤维、6万吨聚酯切片、14万吨VAE、4万吨可再分散性胶粉、4万吨PVB树脂、4万吨PVB胶片、1200万平米PVA光学薄膜、700万平方米偏光片、400万吨水泥熟料的产能。主导产品PVA、高强高模PVA纤维连续多年位居国内前列。PVA光学薄膜、PVB树脂及胶片等产品处于行业技术前沿,先后被列入重点科技攻关项目、火炬计划项目。公司通过 ISO9001、ISO14001、ISO45001质量、环境、职业健康安全体系认证。

集团致力于建设PVA行业流"品质皖维",坚持巩固主业,不断延伸产业链,扩宽产业面,加快产业转型升级,围绕"一体双翼"战略架构,优化资源配置、资本结构和产品结构,打造国家级PVA、高强高模PVA纤维龙头企业。坚持创新驱动发展,大力推进技术创新和产业升级,抢占行业技术制高点。以国际化思维构建大营销格局,着力构建出辐射京津塘环渤海湾经济圈、北部湾珠三角经济圈、长三角经济带的市场布局,大大拓展了企业发展空间。

集团先后被评为国家级高新技术企业、安徽省创新型企业、火炬计划重点高新技术企业。公司拥有全国同行业第一家国家级企业技术中心,安徽省聚乙 烯醇材料工程技术研究中心、博士后工作站和技能大师工作室。

皖维集团坐落于中国五大淡水湖之巢湖,北依京福、商合杭、合武、合宁高铁,合巢芜高速公路,南靠淮南铁路运输动脉,东近长江黄金水道,交通十分便捷。公司位于长三角一体化发展示范区,依托具有活力的华东市场,地缘经济优势明显。国务院批准设立皖江城市带承接产业转移示范区、合芜蚌自主创新示范区,更为皖维快速发展创造无限广阔空间。





Wanwei updated high-tech material industrial Co.,ltd To be first grade enterprise in the world

皖维高新 打造行业世界一流企业



Anhui Wanwei Group Co., Ltd, is a large enterprise under the direct control of State-owned Assets Supervision and Administration Commission of Anhui Provincial Government, It's known as Anhui Vinylon Plant before and was founded in 1969, it's the main project in "Four Five" time. Anhui Wanwei Group Co., Ltd have 6 subsidiaries, the main company Anhui Wanwei Group Co., Ltd which listed in the Shanghai Stock Exchange on may in 1997 (named as Wanwei high-tech, the code is "600063")

The Group Company is an important joint manufacturing enterprise of chemical, fiber and new material in Anhui Province. The total assets is over 8 billion Yuan, the annual sales income is about 4 billion Yuan and the Import and Export volume is more than USD\$100 million. Wanwei Group Company has the products as follow: PVA resin with the capacity 350 thousand tons per year, VAC with the capacity 600 thousand tons per year, with 100thousand tons Methyl acetate,500thousand tons calcium carbide, High tenacity and High modulus PVA Fiber with the capacity 40,000 tons per year, Water soluble fiber with the capacity 15 thousand tons per year, Acetic Anhydride with the capacity 50 thousand tons per year, Polyester Chip with the capacity 60 thousand tons per year, VAE with the capacity 70 thousand tons per year, RDP with the 40 thousand tons per year, PVB Resin with the capacity 40 thousand tons per year, PVB Film with the capacity 5 million square meters, Cement clinker with the capacity 4milion tons per year. The production of our main product PVA Resin and PVA Fiber are No 1 in China, also the leader in the world, the technology of produce PVA Film, PVB Resin and Film products is the most advanced in the industry, those projects have been included in the national key scientific and technological projects, National Torch project. Our company have passed the ISO9001, ISO14001 and OHSASI8001 certification.

Wanwei Group company committed to be world-class quality PVA Company, we insist to strong the main product and expand the product line, speed the industrial transformation and upgrading, with the structure of "one pair of two wings", optimize the resources allocation, capital structure and product structure, aim to be world class PVA Resin, PVA Fiber leading enterprises. We insist to innovation driven development, promote technological innovation and industrial upgrading. seize the height point of industry. With the international thinking to build large marketing pattern, we focus to build Bohai economic circle, the Pearl River Delta in the north Gulf Economic Zone, Yangtze River Delta Economic Zone, this greatly expand the space for enterprise development.

Wanwei Group Company has been named the national high-tech enterprises, Anhui Innovation enterprises, The national torch plan high-tech enterprises. The company has the national industry's first national enterprise technology center, Anhui PVA material engineering technology research center, Post doctoral workstations and skill master studio. Wanwei Group company located in Chaohu- one of the five biggest fresh lakes in China, near by Jingfu, Hewu, Hening high speed train, He-Chao-wu high speed road, In the south, near the Huainan railway transportation line, in the east, near the Yangtze River, which provides very convenient transportation term. Wanwei Group located in the center of He-Ning-Wu economic zone, base on the most dynamic east market in China, the geographical advantage is obvious. The state council approved the establishment of the zone undertake industrial transfer demonstration zone, He-Wu-Beng National independent Innovation zone, those terms create more space for Wanwei development.

# 院维化工 WANWEI Chemical

聚乙烯醇

**Polyvinyl Alcohol** 

乙酸乙烯酯

**Vinyl Acetate** 

精醋酸甲酯

**Methyl Acetate** 

VAE乳液

**VAE Emulsion** 

食用酒精

**Edible Alcohol** 

生化黄腐酸钾干粉 Biochemical Potassium Fulvic Powder

食用酒精

**Edible Alcohol** 

聚乙烯醇 乙酸乙烯酯 精醋酸甲酯 VAE乳液 食用酒精

生化黄腐酸钾干粉 增塑剂

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### 聚乙烯醇

**Polyvinyl Alcohol** 

#### 产品介绍 Product Introduction

安徽皖维高新材料股份有限公司生产的"皖维"牌聚乙烯醇(PVA)系列产品是采用先进的技术和工艺, 一是以电石乙炔法和石油乙烯法生产的醋酸乙烯为原料,二是以生物酒精制乙烯为原料,甲醇为溶剂,过氧 化物为引发剂,经聚合、醇解等工序制成。

#### 物理性质

外观为白色片状、颗粒状或粉状固体(低碱醇解工艺)或白色絮状固体(高碱醇解工艺)。比重: 1.19-1.31g/cm³,片状PVA填充比重: 0.42-0.52g/cm³,絮状PVA填充比重: 0.20-0.27g/cm³。

#### 化学性质

PVA结构式为-[CH<sub>2</sub>CH(OH)]n,式中n表示平均聚合度。PVA的基本性质是由其平均聚合度和醇解度决定的,但是由于PVA分子中存在着10多种不规则结构,因而对其性能也有很大影响。

(1)水溶性: PVA分子因含有大量羟基, 故极易溶于水。其溶解度随水温的升高而增大, 在冷水中仅膨胀 (低醇解度产品能缓慢溶解于常温水中), 在热水中能完全溶解, 其水溶液具有良好的成膜性和粘结性。

(2)热稳定性:本系列产品受热时软化,40°C以下没有显著变化,160°C以上长时间加热会逐渐着色,220°C以上发生分解,生成水、乙酸、乙醛和丁烯醛等。

- (3)耐化学品性:本系列产品几乎不受弱酸、弱碱或有机溶剂影响,耐油性很高。
- (4)储存稳定性:本系列产品稳定性良好,在自然干燥状态下长期储存不发霉、不变质、不吸湿。
- (5)PVA是一种带有仲羟基的高分子聚合物。PVA分子式中的仲羟基具有较高的活泼性,能够进行低分子醇类似的典型化学反应,如酯化、醚化、缩醛化等,还与许多无机化合物、有机化合物反应。对人和动物无毒,可自然降解,被称为绿色产品。













Anhui wanwei updated high-tech material industry co.,ltd produces "Wanwei" brand polyvinyl alcohol (PVA) series products which use advanced technologies and processes. The first is to use vinyl acetate produced by calcium carbide acetylene method and petroleum ethylene method as raw material; The second is to produce ethylene from bioethanol. Methanol as solvent, Peroxide as initiator.

#### Physical properties

Appearance is white flakes, granular or powdered solid (low alkali alcoholysis process) or white flocculent solid (high alkaline alcoholysis process). Specific gravity: 1.19-1.31g / cm³, the proportion of filling flaky PVA: 0.42-0.52g /cm³, cotton shaped PVA filling proportion: 0.20-0.27g / cm³.

#### Chemical properties

PVA formula is CH<sub>2</sub>CH(OH) N ,wherein n represents average degree of polymerization. The basic properties of PVA is determined by its average degree of polymerization and alcoholysis, but because of PVA molecules exist in more than 10 kinds of irregular structure, which also has a great impact on its performance.

- (1) Water-soluble: PVA molecule contains many hydroxyl groups, it is easily soluble in water. Its solubility increases with increasing water temperature. In cold water it is only in the expansion (low-alcoholysis degree products can be slowly dissolved in water at room temperature), completely soluble in hot water, the solution having a good film-forming and adhesive properties.
- (2) Thermal stability: The product softens when heated. It does not change significantly at below 40°C, prolonged heating above 160°C gradually colored, decomposed above 220°C, to produce water, acetic acid, acetaldehyde, and crotonaldehyde etc.
- (3) chemical resistance: This product is hardly affected by the weak acid ,weak alkali or organic solvent, oil resistance is very high .
- (4) Storage stability: The product is stable in the natural dry state. It is not moldy, not bad, not hygroscopic in long-term storage.
- (5) PVA is high polymer with hydroxyl group. Hydroxyl groups in the formula has high lively, low molecular alcohols similar to the typical chemical reactions, such as esterification, etherification, acetalization, etc., There are many inorganic compounds, organic compounds. Non-toxic to humans and animals, natural degradation, known as green products.

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非纤维级 Not FIBER Gr	ade	聚 WANV	乙烯醇树原 WEIPVASPECIFI	脂(低碱) CATION(Lowalk	ali)		
企业标准 Item	对应 国家标准 Corresponding National Standard	醇解度/% (Mol/mol) Degree of Alcoholysis	黏 度/ mpa.s <sup>Viscosity</sup>	挥发分/ %≤ Volatile	乙酸钠/ %≤ Sodium Acetate	灰 分/ %< Ash	Ph值/ %≤ PH
03-88(L)	/	856.0~90.0	2.5~3.5	7.0	1.8	0.7	5~7
03-97(L)	/	95.0~99.0	3.0~4.0	7.0	1.8	0.7	5~7
04-88 (L)	/	85.0~90.0	3.5~4.5	7.0	1.8	0.7	5~7
04-99(L)	/	98.0~99.80	3.5~4.5	7.0	1.8	0.7	5~7
05-88(L)	088-05	85.0~90.0	4.5~6.5	7.0	1.8	0.7	5~7
05-99(L)	098-05	98.0~99.8	4.5~7.0	7.0	1.8	0.7	5~7
08-88(L)	/	85.0~90.0	6.5~8.0	7.0	1.8	0.7	5~7
08-99(L)	/	98.0~99.8	7.0~9.0	7.0	1.8	0.7	5~7
10-88 (L)	088-08	85.0~90.0	8.0~11.0	7.0	1.8	0.7	5~7
10-99(L)	098-08	98.0~99.8	8.0~12.0	7.0	1.8	0.7	5~7
13-88 (L)	/	86.0~90.0	11.0~14.0	7.0	1.8	0.7	5~7
14-92 (L)	/	90.0~94.0	13.0~17.0	7.0	1.8	0.7	5~7
15-99 (L)	/	98.0~99.8	13.0~18.0	7.0	1.8	0.7	5~7
17-88 (L)	088-20	85.0~90.0	20.0~28.0	7.0	1.8	0.7	5~7
17-92 (L)	092-20	90.0~94.0	20.0~28.0	7.0	1.8	0.7	5~7
17-98 (L)	/	97.0~99.0	24.0~32.0	7.0	1.8	0.7	5~7
17-99 (L)	100-27	99.0~100.0	22.0~32.0	7.0	1.8	0.5	5~7
20-88(L)	088-35	85.0~90.0	28.0~40.0	7.0	1.8	0.5	5~7
20-92(L)	092-35	90.0~94.0	29.0~40.0	7.0	1.8	0.7	5~7
20-99(L)	100-35	99.0~100.0	35.0~48.0	7.0	1.8	0.7	5~7
24-88 (L)	088-50	85.0~90.0	43.0~58.0	7.0	1.8	0.7	5~7
24-99 (L)	100-72	99.0~100.0	65.0~85.0	7.0	2.5	1.0	5~7
26-99(L)	100-86	99.0~100.0	85.0~100.0	7.0	1.8	0.7	5~7



非纤维组 Not FIBER (		聚 WANI	乙烯醇树脂(高碱) /EIPVASPECIFICATION(Highalkali)							
企业标准 Item	对应 国家标准 Corresponding National Standard	醇解度/% (Mol/mol) Degree of Alcoholysis	平均聚合度 (Mol/mol)	黏 度/ mpa.s Viscosity	挥发分/ %≤ Volatile	乙酸钠/ %≤ Sodium Acetate	灰 分/ %< Ash	<b>Ph值/</b> %≤ PH		
17-99 (H)	100-27H	99.0~100.0	1600~1800	20.0~26.0	8.0	2.8	2.8	7~10		
19-99 (H)	100-31H	99.0~100.0	1800~2000	26.0~34.0	8.0	1.3	2.8	7~10		
20-99 (H)	100-37H	99.0~100.0	2000~2300	34.0~42.0	8.0	1.3	2.8	7~10		
23-99 (H)	100-50H	99.0~100.0	2300~2600	42.0~55.0	6.5	1.3	2.5	7~10		
22-99 (H)	广西皖维	99.0~100.0	2300~2600	42.0~55.0	8.0	1.3	2.8	7~10		
24-99 (H)	100-60H	99.0~100.0	2600~2900	55.0~65.0	8.0	1.3	2.8	7∼10		

#### 纤维级 FIBER Grade 聚乙烯醇树脂 WANWEIPVASPECIFICATION 乙酸钠/ 挥发分/ 灰 分/ 纯 度/ 透明度/ 氢氧化纳/ 醇解度/% 平均聚合度 规格 %≤ PH (Mol/mol) %≤ Item (Mol/mol) Sodium Degree of Alcoholysis Ash Ash Ash Acetate 常规水溶料17-99(L) 99.5~100.0 $1700 \sim 1800$ 5.0 2.0 93.0 95.0 0.10 0.8 99.8~100.0 高强料17-99(L) $1750 \sim 1900$ 5.0 2.5 1.0 92.5

#### 皖维PVA各品种的主要应用范围 Wanwei PVA Main application

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10-99(L)

17-80(L)

MODE: CALIFICATION OF	
产品型号 Item	主要应用 Application
04-88(L) 04-99(L) 05-88(L)	药膜、外用医药基材、水溶性薄膜、高支、高密浆纱料、平板印刷的感光膜、造纸、乳液 Medicine Film ,Outer pharmaceutical base material, Water soluble Film, High Count,Flat printing photosensitive film,Paper making,Emulsion.
05-99(L) 10-92(L) 14-92(L)	药膜、外用医药基材、经纱浆料、脱模剂、乳化剂等 Medicine Film ,Outer pharmaceutical base material, Warp Size,Emulaifier
15-99(L) 17-88(L) 20-88(L)	油井固井混凝土改性剂、土壤改良剂、再湿粘合剂、经纱浆料、PVA薄膜、PVAC乳液保护胶体、感光胶、 PVB等 Concrete modifier for oil well cementing, Soil improcement agent, Wet adhesive, Warp Size, PVA Film, PVAC Emulsion protective colloid, Light-sensitive Glue, PVB and so on.
17-92(L) 17-96(L) 17-95(L) 17-98(L) 17-97(L) 19-99(L) 17-99(L) 20-99(H) 17-99(H)	织物浆纱料、织物整理剂、纸张表面施胶剂、纸张颜料粘合剂、纸张粘合剂、乳化剂、PVA薄膜、热固性 树脂改良剂、铁氧体粘结料、分散剂、涂料、胶水、PVB、PVF等 Fabric sizing material,Fabric finishing agent, Paper surface sizing agent,Paper pigment binder,Paper adhesive,Emulsifier,PVA Film,Thermosetting resin modifier,Ferrite bonded material,Dispersant, Coating,Glue,PVB,PVF and so on.
26-99(L)	高粘度粘合剂、高档涂料等 High viscosity adhesive, High-grade paint.
17-99F(L) 17-99F(H) 26-99(L)	维纶、高强高模PVA纤维、水溶性纤维、阻燃、中空纤维等 Vinylon,HSHM-PVAL FIBER,Water soluble fiber,Flame reterdant,hollow fiber and so on.

PVC聚合时的分散剂等 PVC Dispersant in Polymerization



### —— 醋酸乙烯

**VINYL ACETATE MONOMER** 

#### 产品介绍 PRODUCT INTRODUCTION

醋酸乙烯(又名乙酸乙烯酯、VAC)。皖维公司醋酸乙烯产品采用电石乙炔法和生物质乙烯法生产工艺,目前现有产能有70万吨/年,其中皖维本部产能15万吨/年(电石乙炔法)、子公司蒙维科技45万吨/年(电石乙炔法)、子公司广维10万吨/年(生物质乙烯法)。

Vinyl acetate produced by calcium carbide method and biomass ethylene process, Existing production capacity is 700000 tons/year, of which the WanWei headquarters production capacity is 150000 tons/year (calcium carbide method), Subsidiary MengWei 450000 tons/year (calcium carbide method) subsidiary Guangxi Company 100000 tons/year (Biomass ethylene method).

产品执行2014工业用乙酸乙酯行业标准,具体质量指标如下: Perform 2014 industry standards, specific quality indicator is as follows:

t∆ī∆ī∓ □	技	术指标 Specificat	ion
<b>检验项目</b> Item	优等品 Classy article	一等品 Grade a	合格品 Nonconforming product
外观 Apperance	无色透明液体, 尹	Colorless trans mechanical im	parent liquid, no purities
密度, (20℃) g/cm³ Density	0.930-0.934	0.930-0.934	0.929-0.935
色度, Pt-Co(Hazen) Chroma	<b>≤</b> 5	≤10	≤15
蒸发残渣 / (mg/kg) Evaporation residue	≤50	≤100	≤50
酸度(以乙酸计)/(mg/kg) Acidity value(Acetic acid)	≤40	≤100	≤200
醛含量(以乙醛计)/ (mg/kg) Aldehyde content (Acetaldehyde)	≤200	≤300	≤500
水分,% (mg/kg) Water content	≤400	≤600	≤1000
纯度, ω/% Purity	≥99.8	≥99.6	≥99.4
乙酸甲酯 / (mg/kg) Methyl acetate	由供	需双方商定 Agreed by both pa	arties
乙酸乙酯 / (mg/kg) Ethyl acetate	由供	需双方商定 Agreed by both pa	arties
苯 / (mg/kg) Benzene	≤20	_	_
活性度 / min Active degree	由供	需双方商定 Agreed by both pa	arties
阻聚剂(对苯二酚)/ (mg/kg) Polymerization retarder (hydroquinone)	由供	需双方商定 Agreed by both pa	arties

产品用于聚醋酸乙烯、聚乙烯醇、白乳胶、EVA\VAE、腈纶等领域 Products used in poly (vinyl acetate, polyvinyl alcohol, EVA\VAE, acrylic, etc





### 精 (粗) 醋酸甲酯

#### **METHYL ACETATE**

#### 产品介绍 / PRODUCT INTRODUCTION

皖维公司凭借多年的化工产品开发和专业的技术团队,运用国际先进的化学分离技术,对PVA生产过程中的副产品--醋酸甲酯进行提纯制取,2012年建成年产20万吨高纯度工业用醋酸甲酯装置,该装置生产生产工艺先进,甲酯纯度高,产品性能优良,质量稳定,具有多项自主知识产权,居国内同行业领先水平。

醋酸甲酯主要用于代替丙酮、丁酮、醋酸乙酯、环戊烷等传统溶剂,美国在2005年时,就用醋酸甲酯代替丙酮溶剂。醋酸甲酯作为一种新型有机溶剂,属于国际上不限制使用的有机溶剂物质,可以达到涂料、油墨、树脂、胶粘剂厂新的环保标准,属于国家产业政策鼓励开发的绿色环保产品。

With many years of chemical production and development experience and the technical team, Wanwei Company using the international advanced chemical separation technology, purified the PVA byproducts Methyl acetate during the manufacturing process. The annual output comes to 200,000 tons of high purity Methyl acetate devices for industrial use. The device of production technology is advanced, methyl ester purity high, excellent product performance and stability quality, also with a number of independent intellectual property rights. Now it has become the domestic leading compared with the same industry.

Methyl acetate is used primarily instead of acetone, methyl ethyl ketone, ethyl acetate, cyclopentane and some other traditional solvents. In 2005, the united States, replace acetone solvent with methyl acetate. as a new type of organic solvent, Acetic acid methyl ester belongs to the organic solvents material which is not restrict using in the international, and it could reach the coatings, inks, resins, adhesives factory environmental standards, which belongs to the national industrial policy to encourage the development of green products.

精甲酯质量技术指标(Q/WW02.008企业标准)

检验项目 Item	技术指标 Specification
外观 Apperance	无色透明液体,无机械杂质 Colorless transparent liquid,no mechanicalinpurities
色度, Pt-Co(Hazen) Chroma	≤10
水分,% (m/m) Water content	≤0.050
酸值(以乙酸计),%(m/m) Acid Value(Acetic acid)	≤0.05
醛酮总量,% (m/m) Total content of aldehyde and ketone	≤0.10
纯度, % (m/m ) Purity	≥99.50

粗甲酯质量技术指标 (Q/WW02.008企业标准)

检验项目	技术指标
外观 Apperance	无色透明液体,无机械杂质 Colorless transparent liquid,no mechanicalinpurities
色度, Pt-Co(Hazen) Chroma	≤10
水分,% (m/m) Water content	≤0.15
醋酸甲酯含量,% ( m/m) purity	≥75.0
甲醇含量,%(m/m) Purity Methanol content	≤25.0
酸值 (以乙酸计) ,% (m/m) Acid Value (Acetic acid)	_
醛酮总量,% (m/m) Total content of aldehyde and ketone	≤0.10

#### 产品特点及应用 CHARACTERISTICS AND APPLICATIONS

- 1,能与大多数有机溶剂互溶,具有广泛的溶解力,溶解力强,能溶解丙烯酸类、乙烯基类、硝基纤维素类、环氧类、聚氨酯类、聚酯类、酚醛树脂类等;
- 2,性能稳定,挥发速度快,调配稀释剂时,在任何比例下使用 不会引起 "烧伤" "发白" 等现象,顾客只需要根据自身需求调节溶剂挥发速度即可;
- 3, 比丙酮具有更高的闪点和更高的防白性能, 能更好的符合涂料、油漆工艺配方和用户的使用要求;
- 4,在需要使用沸点挥发性有机溶剂的工艺配方中,可以取代乙酯和丙酮、丁酮的应用;
- 5,在聚氨酯鞋材可以替代环戊烷、氟氯烃等,作为环保的发泡剂;
- 6,产品属于环保产品,产品通过国际SGS环保认证,复合欧美ROHS指
- 令,是一种理想的环保溶剂

主要用于医药、涂料、油墨、油漆、胶粘剂、皮革生产过程所需的有机溶剂,聚氨酯泡沫发泡剂,天那水等产业领域。

- 1. Miscible with most organic solvents; Wide range of solvency; it can dissolve acrylic, vinyl, nitrocellulose, epoxy, polyurethane, polyester and phenolic resin.
- 2.Stable performance, volatile speed when leveling thinner, use does not cause in any proportion "burning rubber", "white" and so on, clients only need to adjust the solvent evaporation speed according to their own needs;
- 3. With a higher flash point and higher anti-white performance than acetone, it is better suited to craft paint and paint formulation.
- 4. Substitute for ethyl ester, acetone and butanone in needs of a low boiling point volatile organic solvent.
- 5.Substitute for cyclopentane and CFCs in polyurethane shoe material as green blowing agent .
- 6.environmentally friendly products, obtain SGS environmental certification, in line with the European ROHS directive, is an ideal solvents.

Applications:Organic solvent for resin, coating, ink, paint, adhesive, leather, polyurethane foam blowing agent and thinner production.



### VAE乳液

**Vae Emulsion** 

#### 产品介绍 PRODUCT INTRODUCTION

VAE乳液是(乙酸乙烯酯乙烯共聚乳液)的简称,它是以乙酸乙烯酯单体和乙烯单体为基本原料,采用中压乳液聚合方法共聚生产的乳液产品。其工艺特点是:采用外循环搬出反应热,聚合时间短,生产能力大,聚合生产过程由计算机控制,产品质量稳定,能耗低、污染小。该产品无毒、无味,属国家推荐的环保型产品。VAE乳液是一种乳白色液体。VAE乳液因为有乙烯共聚单体而具有内增塑性,并具有良好的成膜性、耐候性、粘结性及广泛相容性、耐弱酸碱性等特性。

VAE emulsion is short of vinyl acetate copolymer emulsion, it is the emulsion product which uses vinyl acetate monomer and ethylene monomer as raw material with the method of press copolymerization. The characteristics of the process is using outer loop to expose the heat of reaction, the polymer is fast,



the capacity is large, the process of polymer is controlled by computer, the product quality is stable, low depletion, little pollution. The product is non-toxic, tasteless, it is environmental protection product which is recommended by the government. VAE emulsion is a kind of milky liquid. Because of ethylene copolymerization monomer, VAE emulsion has the characteristic of inner plasticizing, and filming, weather resistance, adhesive, and compatible, weak acid and alkali resistance.

#### 粘合剂基料

VAE乳液可作为木材及其制品、纸张及其制品、包装复合材料、塑料、 建筑物等的粘合剂基料。

#### 涂料基料

VAE乳液可作为内墙涂料、弹性涂料、屋顶及地下水防水涂料、防火保 温涂料的基料,还可作为建筑物嵌缝、密封粘合剂的基料。

#### ADHESIVE BASIC MATERIAL

VAE emulsion can be used as adhesive basic material, such as wood and wooden products, paper and paper products, package composite materials, plastics, structure.

#### PAINT BASIC MATERIAL

VAE emulsion can be used as inner wall paint, elasticity paint, waterproof paint of roof and groundwater, the basic material of fireproof and heat preservation paint, it also can be used as the basic material of the caulking of structure, sealing adhesive.

#### 纸张施胶及纸张上光处理

VAE乳液可以给多种纸张施胶及上光,是制造各类高级纸张的优良材料。 VAE乳液可用作无纺布粘合剂的基料。

#### 水泥改性剂

VAE乳液渗入水泥 浆中可以大大改善水泥制品的性能。

VAE乳液可作为簇绒地毯、针刺地毯、编织地毯、人造皮毛、人造皮草、 静电植绒、高级建筑拼装地毯等的粘合剂。

#### PAPER SIZING AND GLAZING

VAE emulsion can sizing and galzing many kinds of paper, it is excellent material of producing many kinds of advanced paper. VAE emulsion can be used as the basic material of no-woven adhesive.

#### **CEMENT MODIFIER**

VAE emulsion can be mixed with cement mortal so that improving the property of the cement product.

VAE emulsion can be used as the adhesive, such as tufted carpet, needle carpet, weaving carpet, artificial fur, electrostatic flocking, high-level structure assemble carpet.

#### 参数、特性、应用范围

品名 Name	固含量 % ≥ Solid Content	Ph值 PH Value	粘度(25℃) Mpa.s <sub>Viscosity</sub>	残留乙酸乙烯酯 % ≤ Remain Vam	粒径 um≤ Particle Size	稀释稳定性 % ≤ Dilution Stability	最低成膜温度 ≤ The Minimum Film-forming Temperature	乙烯含量 % Ethylene content	特性及优点 Property And Advantages	应用范围 Application
GW-705	54.4	4.0-6.0	1500-2500	0.5	2	3.5	0	16±2	高品质的通用粘合剂、优良的初粘性、机械稳定性、内增塑性。 The common adhesivewith high quality, excellentinitial adhesion, mechanical stability, increases in the plastic	纸质品加工、木材加工 包装、线圈粘合剂、卷 烟、水泥改性
GW-706	54.4	4.0-6.0	2500-3300	0.5	2	3.5	0	16±2	粘度比GW-705更高对多孔基材粘结效果良好. It is more glutinous than GW-705, the effect of adhibiting basic material is good	Paper product,wooden package, cement, cigaratte
GW-707	54.4	4.0-6.0	500-1000	0.5	2	5	0	16±2	最大的优点是在静负荷条件下具有极好的耐水性.具有良好的粘结性. The biggest advantages is its good water resistance in the condition of the static load, it has excellent adhesive	纸质品加工、包装、线圈 粘合剂、高速粘结剂、涂 料、防水涂层
GW-707H	54.4	4.0-6.0	1000-1500	0.5	2	3.5	0	16±2	与GW-707相比具粘度稍高,具有更好 的耐水性和粘结性。 It is more glutinous than GW-707, it has better water resistance and adhesive	Paper product, package, coil adhesive, high-speed adhesive, water resistance coating
GW-102	55.0	4.0-6.5	3500-4000	0.5	0.2-2.0	3.5		16.5	具有较高的初粘性和粘接强 度。 It has better adhesive	布料粘接、鞋材胶复合、覆膜胶、木材加工、包装业、书本装订等 Coat adhesive, shoes adhesive, film, wood, package, book binding
GW-102H	55.0	4.0-6.5	4000-4500	0.5	0.2-2.0	3.5		17.0	物料兼容性良好 The compatibility of material is good	鞋材胶粘剂、布料织物胶粘复合、木材加工、纸制品书本印刷、家具加工中粘结等 shoes adhesive, clothes adhesive, wood, paper painting, furnishing

品 名 Name	机械稳定性 Mechanical Stability	低温稳定性 Low temperature stability	干粘性 Wet sticky	湿粘性 Wet sticky	耐硼 性 Borax resistance	耐水性 Water resistance	膜透明性 Transparent of film	气味 Flavor	有机挥发物 Organic volatile	热密封温度 Heat sealing °C temperature	接着强度 Intensity	热稳定性 Heat sealing temperature
GW-102H	优秀 Excellent	好 Good	好 Good	好 Good	凝结 condense	一般 ordinary	透明 trasparent	低 LOW	低 LOW	80	优良 Excellent	良好 Good



### 食用酒精

#### **CONSUME ALCOHLO-Edible Alcohol**

#### 产品介绍 PRODUCT INTRODUCTION



广西皖维公司年产食用酒精5万吨,是充分利用当地丰富的生物质资 源,以废糖蜜为原料,采用固定化活性增殖酵母技术发酵酿制成食用酒 精, 其发酵机理为: 发酵罐中糖蜜稀释液中的糖分在酵母菌作用下分两 大步发酵生成酒精。一是酵母菌首先将体内的转化酶(即蔗糖酶.系一 种胞外酶)借扩散作用分泌到细胞体外将发酵液中的蔗糖进行水解转化 为葡萄糖和果糖。二是葡萄糖和果糖通过扩散作用进入酵母细胞体内,

在酵母体内酒化酶(胞内酶)的作用下发酵变成酒精和二氧化碳。

Guangxi WanWei company with an annual output of 50000 tons of edible alcohol, make full use of local abundant biomass resources, using molasses as raw material, adopts the proliferation activity of immobilized yeast fermentation technology into edible alcohol, and the fermentation mechanism as follows: the sugar molasses diluent in the fermentation tank under the effect of yeast in two step generated alcohol fermentation. First, yeast will be the first body of the invertase (namely, sucrase. An extracellular enzyme, secreted into the cell by diffusion, that hydrolyzes sucrose from the fermentation broth and converts it to glucose and fructose. The second is that glucose and fructose enter yeast cells through diffusion and are fermented into alcohol and carbon dioxide under the action of zymes (intracellular enzymes) in yeast.

#### 数、特性、应用范围

食用酒精学名: 乙醇, 分子式: C2H5OH,分子量: 46

一、物理化学性质

乙醇熔点: -114.1℃(158.8 K) 乙醇沸点: 78.3 ℃(355.6 K)

乙醇比重: 0.78945 g/cm³; (液) 20℃

食用酒精溶于水、甲醇、乙醚和氯仿。能溶解许多有机物和若干无机物。具有吸湿性,能与水形成共沸混合物。与铬酸、次氯酸钙、过氧化氢、 硝酸、硝酸铂及氧化剂反应剧烈,有发生爆炸的危险。易挥发,极易燃烧,火焰淡蓝色。

#### 二、食用酒精用途

公司生产的食用酒精乙醇含量达95%以上,主要用于食品加工与生产,还可用于化妆品、医药等领域,也可兑水后直接食用。用作加工酒精饮料 时,应按其食用原料加工工艺要求使用。直接食用时,食用酒精的浓度达到30%以上可引起胃粘膜出血和糜烂。食用酒精还能通过皮肤和呼吸道 进入体内。食用酒精对人体的作用与其浓度和吸收速度成正比,即浓度越高,吸收速度越快,作用也越明显。高血压和心脑血管疾病患者、肝 脏、肠胃不适者慎用。

#### 三、注意事项

本产品应保存于阴凉、干燥、通风的环境中,应防高温、火种、静电和雷电。装运食用酒精应使用专用的罐、槽车和铁桶,禁止使用铝桶或镀锌 容器包装。运输工具应清洁、卫生,不得与有毒、有害、有腐蚀性或有异味的物品混装、混运、混合存放。搬运时应轻装轻卸,严禁扔摔、撞击 和剧烈震荡,并应远离热源和火种。运输过程应防火、防爆、防静电、防雷,不得曝晒。

本产品应保存于阴凉、干燥、通风的环境中,应防高温、火种、静电和雷电。装运食用酒精应使用专用的罐、槽车和铁桶,禁止使用铝桶或镀锌容器包装。运输工具应清洁、卫生,不得与有毒、有害、有腐蚀性或有异味的物品混装、混运、混合存放。搬运时应轻装轻卸,严禁扔摔、撞击 和剧烈震荡,并应远离热源和火种。运输过程应防火、防爆、防静电、防雷,不得曝晒。

Edible Alcohol Name: Ethanol Molecular Formula: C2H5OH

Formula Weight: 46

Ethanol melting point:-114.1° C(158.8 K)

The boiling point of ethanol:78.3 C(355.6 K)

The proportion of ethanol 0.78945 g/cm3;20° ℃

Edible alcohol is soluble in water, methanol, ether and chloroform. Can dissolve many organic matter and some inorganic matter. It has hygroscopicity and can form azeotropic mixture with water. It reacts violently with chromic acid, calcium hypochlorite, hydrogen peroxide, nitric acid, platinum nitrate and oxidant, and has the risk of explosion. Volatile, easy to burn, flame light blue.

The use of Edible alcohol

The content of edible ethanol produced by the company is more than 95%, which is mainly used in food processing and production. It can also be used in cosmetics, medicine and other fields, and can also be directly eaten after being mixed with water. When used for processing alcoholic beverages, it should be used according to the processing technology requirements of its edible raw materials. When direct edible, the concentration of edible alcohol reaches above 30% to be able to cause gastric mucous membrane haemorrhage and erosion. Alcohol can also enter the body through the skin and respiratory tract. The effect of edible alcohol on human body is proportional to its concentration and absorption speed, namely the higher the concentration is, the faster the absorption speed is, the more obvious the effect is. Use with caution in patients with hypertension, cardiovascular and cerebrovascular diseases, liver and gastrointestinal discomfort.
The product should be kept in a cool, dry and ventilated environment, and should be protected from high temperature, fire, static electricity and lightning. Special cans, tankers and iron

drums shall be used for the shipment of edible alcohol. Aluminum drums or plated containers shall not be used for packaging. The means of transport shall be clean and hygienic, and shall not be mixed with poisonous, harmful, corrosive or smelly articles for loading, transportation and storage. Handling should be light unloading, do not throw, impact and violent shock, and should be away from heat and fire. The transportation process should be fireproof, explosion-proof, anti-static, lightning protection, not exposed to the sun.

### 生化黄腐酸钾干粉

**Biochemical potassium fulvic powder** 



#### 产品介绍 / Product Introduction

本公司产品生产工艺为接收现有的糖蜜酒精生产装置所产生的浓缩液,通过离心喷雾干燥装置制成的粉状物,俗称糖蜜粉,又称黄腐酸钾、黄腐酸粉等,黄腐酸钾粉是一种多价酚型芳香族化合物与氮化合物的缩聚物,外观为棕褐色粉末,香甜气味,系纯天然发酵品,无任何毒副作用,含有硫、钙、镁、锌、铁、钼、硼等中微量元素,以及大量的B族维生素、维生素C、肌醇、多糖等,还含有多种维生素、微量元素、菌体蛋白、核酸、表面活性物及促生长因子(生物活性物质)等。

The company product production process for receiving concentrate produced by the existing molasses alcohol production equipment, through the centrifugal spray drying equipment made into fine powder, commonly known as molasses powder, also called fulvic acid potassium, fulvic acid powder, etc. Fulvic acid potassium powder is a kind of multivalent polycondensate type phenolic aromatic compounds and nitrogen compounds. Appearance to brown powder, sweet smell, is pure natural fermentation product, without any side effects, containing sulfur, calcium, magnesium, zinc, iron, molybdenum, boron and other trace elements, as well as a large number of B vitamins, vitamin c, inositol, polysaccharide, etc., Also contains a variety of vitamins, trace elements, bacteria protein, nucleic acid, surface active substances and growth factors (bioactive substances), etc.

#### 使用方法 / Method of use

- 1、本品可作蔬菜、果树种植等植物的基肥、穴肥,可冲施、追施、喷施和滴灌等,每亩用量30~50公斤。
- 2、黄腐酸钾在配伍复混肥 添加量是5-10%,黄腐酸钾在水产施用是 1米水深每3-5公斤,黄腐酸钾在饲料的配比约占5%。
- 3、可作为粉状地膜使用,本品均匀喷散于需要地膜的土壤背面: 10分钟即可成膜,出苗后自动降解为肥料,省钱省工!
- 1. This product can be used as base fertilizer and hole fertilizer for vegetables, fruit trees and other plants. It can be used as irrigation, topdressing, spraying and drip irrigation, with the amount of 30~50 kg per mu.
- 2. The amount of potassium fulvic acid added in the compound compound fertilizer is 5-10%. The potassium fulvic acid applied in aquatic products is 3-5kg for 1 meter water depth, and the ratio of potassium fulvic acid in the feed is about 5%.
- 3. Can be used as a powder plastic film, the product evenly sprayed on the back of the soil need plastic film for 10 minutes to form the film, automatic degradation into fertilizer after seedlings. Use this product to save work and money.

#### 注意事项 / Matters needing attention

- 1、水溶型黄腐酸钾易吸潮,吸潮后易溶于水,易板结,要存放于防湿防水防晒的干燥地带,要处于高度密封状态,受潮板结的黄腐酸钾可泡水溶解后做成液体肥料使用。
- 2、特殊地力及作物等,应向当地农技部门咨询用量。
- 3、生产日期:见袋内格证。
- 1. Water-soluble potassium fulvic acid is easy to absorb moisture, after absorbing moisture is easily soluble in water, easy to harden, to be stored in the wet waterproof and suntan dry zone, to be in a highly sealed state, the moisture-bound potassium fulvic acid can be used as liquid fertilizer after being dissolved in water.
- 2. For special soil fertility and crops, should consult the local agricultural technology department.
- 3. Date of production: see the label in the bag.

#### 产品特点及应用 CHARACTERISTICS AND APPLICATIONS

本公司生产的黄腐酸钾粉,含有作物所需要的多种营养元素,N+P2O5+K2O=10%,有机质≥60%,富含水溶性黄腐酸和有机质以及氨基酸。养分含量高,质好,作物吸收快。本品可活化板结土壤,促进各种瓜果蔬菜和大田农作物的生理代谢,促进根系发达、茎叶繁茂。产品全溶于水、耐酸碱、抗二价离子,可与多种微量元素和大量元素共溶复配,不絮沉。可直接施用,也可用做叶面肥、冲施肥和有机肥、药肥、微肥及水产肥、液态地膜、腐植酸保水剂的主剂或添加剂,还可做有机无机复合肥高塔喷浆造粒的缓释肥包衣原浆。常用作水溶肥、饲料添加剂等,使用效果十分明显,是一种运用广泛、质优价廉的有机肥料。

Potassium fulvic acid powder produced by our company contains a variety of nutrient elements needed by crops, N+ P205+ K2O= 10%, organic matter ≥60%, rich in water-soluble fulvic acid, organic matter and amino acids. It has the characteristics of high nutrient content, good quality and fast uptake by crops. This product can activate the stiffened soil, promote the physiological metabolism of various fruits and vegetables and field crops, and promote the developed root system, luxuriant stem and leaves. The product is fully soluble in water, acid-alkali resistant and divalent ion resistant. It can be co-dissolved with a variety of trace elements and a large number of elements without flocculation. Can be applied directly. Can also do foliar fertilizer, fertilizer and organic fertilizer, drug fertilizer, micro fertilizer and aquatic fertilizer, liquid plastic film, humic acid water retention agent of the main agent or additive, but also can do organic and inorganic compound fertilizer high tower spray granulation of slow-release fertilizer coating raw pulp. Commonly used as water soluble fertilizer, feed additives, use effect is very obvious, is a widely used, quality and cheap organic fertilizer.



### 增塑剂

#### **PLASTICIZER**

#### 产品介绍 / Product Introduction

三甘醇二异辛酸酯(又称增塑剂)无色无臭有吸湿性的粘稠液体,溶于水和乙醇。性能稳定。结构中有亲水基团,可提高水溶性。是合成感光树脂及交联剂的重要单体,也用于涤纶片基的粘合剂中。宜储于阴凉、干燥处。工业 本品为为溶剂型耐寒增塑剂,具有优良的低温性、耐久性、耐油性、耐紫外线照射和抗静电性,且具有粘度低和一定的润滑性。其分子结构中有两个醚键,分子极性与乙烯基树脂分子相近,且结构稳定。异辛酸分子支链带有侧基,这种分子结能赋予软塑料制品优异的柔软性、光热稳定及耐低温性,能使产品具有良好的色度和透明性。与树脂相近的极性使其与树脂相溶性良好。

A colorless, hygroscopic, viscous liquid soluble in water and ethanol. Stable performance. The structure has hydrophilic groups, which can improve water solubility. It is an important monomer in the synthesis of photosensitive resin and crosslinking agent, and also used in the adhesive of polyester film base. Store in a cool, dry place. This product is a solvent-based cold resistant plasticizer, with excellent low temperature, durability, oil resistance, uv resistance and antistatic, and has low viscosity and certain lubricity. Its molecular structure has two ether bonds, the molecular polarity is similar to vinyl resin molecules, and the structure is stable. Iso-octanoic acid molecular branched chain with side group, this molecular junction can give soft plastic products excellent softness, photothermal stability and low temperature resistance, can make the products have good color and transparency. The similar polarity to the resin makes it compatible with the resin.

#### 产品的应用领域/ Applications of the product

本产品广泛应用于PVB安全膜、合成橡胶、乙烯基树脂、PVC、PS、硝醛纤维素、乙基纤维素、聚乙烯乳胶漆、工业涂布涂层、密封材料,也用于丁二烯-丙烯腈类耐油合成橡胶等。该产品为目前聚乙烯醇缩丁醛(PVB安全膜)和合成橡胶的最佳特效增塑剂,能使之产生极佳的低温性能和低挥发性。用作含蓖麻油的聚乙烯醇的缩丁醛布基涂料时,能显著改善严寒条件下的柔顺性。用于合成橡胶,用量一般都比其他增塑剂低。

This product is widely used in PVB safety film, synthetic rubber, vinyl resin, PVC. PS. Nitraldehyde cellulose, ethyl cellulose, polyethylene emulsion paint, industrial coating coating, sealing materials, also used in butadiene acrylonitrile kind of oil-resistant synthetic rubber. The product is currently the best special effect plasticizer for polyvinyl butaldehyde (PVB safety film) and synthetic rubber, which can produce excellent low temperature performance and low volatility. When used as a polyvinyl alcohol (PVA) coating containing castor oil, it can significantly improve the compliance under cold conditions. Used for synthetic rubber, generally lower than other plasticizers.





#### 技术要求 SPECIFICATION

指标Index 等级Grade 项目Item	合格品	优等品
三甘醇二异辛酸酯含量%≥	98.0	98.5
酸值 (mgKOH/g) ≤	0.1	0.05
热稳定试验后酸值 (180℃加热2h) mgKOH/g % ≤	1.0	0.50
加热减量% (125℃加热2h) ≤	0.50	0.30
色度 (Pt-Co) APHA≤	30	20

# 院维化纤 WANWEI Chemical Fiber

高强高模PVA纤维

High strength high modulus PVA fiber

聚酯切片

Polyester chip

水溶性PVA纤维

Water-soluble PVA fiber

#### 高强高模PVA纤维 聚酯切片 水溶性PVA纤维

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### 高强高模PVA纤维

HIGH STRENGTH HIGH MODULUS PVA FIBER

#### 产品介绍 / Product Introduction







高强高模PVA纤维,强度高、模量大,被广泛应用于建筑材料,大型水电大坝、高速公路、桥梁混凝土工程和造币、军事等特殊领域;具有耐酸碱、抗老化、无污染、环保性等优势,是替代工业石棉最理想材料。

皖维高强高模PVA纤维获得"国家级新产品称号",其生产工艺先进,具有众多独创技术,其中的中和水洗装置荣获国家专利。

皖维现拥有12条高强高模PVA纤维生产线,年生产能力达4万吨。产品畅销欧美、东南亚、非洲等30多个国家和地区。

PVA fiber, with high strength and large modulus, is widely used in building materials, large hydropower dams, expressway, concrete works, coinage, military and other special fields. It has advantages of acid and alkali resistance, anti-aging, no pollution and environmental protection. It is the best material to replace asbestos.

Wanwei high strength and high modulus PVA fiber has won the title of "national new product". the production process is advanced and has many original technologies. Among them, the neutralization water washing device has won the national patent..

Wanwei has 12 PVA fiber production lines, production capacity is 40000 tons per year. Wanwei's pva fiber is sell well in 30 countries and regions such as Europe, America, Southeast Asia and Africa.

#### 高强高模PVA纤维技术要求/ High strength high modulus PVA fiber technical requirements

品名 Product Name 项目Item	高强高模聚乙烯醇纤维 W1 (超短纤)	高强高模聚乙烯醇纤维 W2 (超短纤)	高强高模聚乙烯醇纤维 W4 (超短纤)					
分子式 Molecular formula	(CH <sub>2</sub> CHOH),	(CH <sub>2</sub> CHOH),	(CH <sub>2</sub> CHOH),					
纤度 Title	2.0±0.25dtex	2.0±0.25dtex	2.0±0.30dtex					
强度 Tenacity	≥11.5CN/dtex	≥12.8CN/dtex	≥13.5CN/dtex					
伸度 Elongation	≤7.5%	≤7%	≤7%					
模量 ( 0.1-0.4% ) Modulus	≥260CN/dtex	≥290CN/dtex	≥320CN/dtex					
热水减量(90°C,1小时) Hot Water solubility	≤2%	≤2%	≤1.5%					
比重 Density	1.29	1.29	1.29					
切断长度 Cut length	5mm,6mm(可根据客户定制 )	5mm,6mm(可根据客户定制)	5mm,6mm(可根据客户定制 )					
包装 Packing		180公斤净重塑编袋(1000×550×600mm) 12.96吨/20°FCL集装箱						
用途 Uses	石棉代用品;用于建材、混凝土业等领域;可用做塑料、橡胶的增强纤维。 It is the best substitution of asbestos, used in the building material industry, concrete industry and so. It a							

can increase intensity of plastic and rubber.

### 聚酯切片

**POLYESTER CHIP** 

#### 产品介绍 / Product Introduction

公司聚酯分厂拥有年产4万吨间歇式差别化聚酯生产线和年产5万吨连续式差别化聚酯生产线共计9万吨差别化聚酯产能,经过多年的研发攻关产品涵盖五大系列:HCDP系列、ECDP系列、水溶系列、海岛系列、差别化膜用系列(二十多个品种),差别化聚酯产品种类、规模处国内同行业之首,产品质量广受下游客户好评。为充分适应市场需求,我公司提供灵活的合作模式和良好的合作平台,热忱欢迎国内外有识之士开展代加工、定制化生产、定制化销售、合作开发等互赢模式。

The company's Polyester branch plant has an annual output of 40000 tons of intermittent differential polyester production line and an annual output of 50000 tons of continuous differential polyester production line, a total of 90000 tons of differential polyester capacity. After years of research and development, the products cover five series: HCDP series, ECDP series, water-soluble series, Island series, differential film series (more than 20 varieties), differential polyester products The scale is the first in the same industry in China, and the product quality is well received by downstream customers. In order to fully meet the market demand, our company provides flexible cooperation mode and good cooperation platform. We warmly welcome people of insight at home and abroad to develop win-win models such as OEM, customized production, customized sales and cooperative development.

#### 产品的应用领域/Applications of the product

HCDP系列聚酯切片:包含特种阳离子(波斯纶)、复合高收缩、新品改性、特阳-EF(无型)等品种。该品种阳离子改性单体含量高达10%以上,一般与再生聚酯瓶片或大有光按40%~50%比例混合纺制短纤,可适用于多种服装面料、针织品、毛绒丝、植绒丝、地毯、绒线,人造毛皮等,产品也可与腈纶、羊毛混纺实现同浴染色功能。

**ECDP系列聚酯切片**:包含CDP2.5、ECDP3.0、ECDP4.5、安虹、无 系列ECDP等。该品种共聚阳离子改性单体(三单体)和易吸色、易吸 湿、柔性高的第四单体,各单体含量可依据产品下游需求进行调整,通过多年的工艺优化和设备改进产品下游使用具有阻件升压周期长、纺丝温 度低、制成率高等优点,产品多用于纺制BCF长丝、FDY长丝或短纤,广泛应用于印花地毯、服饰面料、植绒丝等领域。

水溶系列聚酯切片:包含普通长丝上浆用水溶性聚酯切片、细旦(多F数)型长丝上浆用水溶性聚酯切片、再生型水溶性聚酯切片、弹丝上浆用水溶性聚酯切片、短纤上浆用水溶性聚酯切片、无纺布上浆用水溶性聚酯切片(高固含量、低乙醛含量)、无 系列水溶性聚酯切片等。水溶系列聚酯切片通过共聚多种改性单体赋予产品水可溶解性能,结合主链结构单元特性,产品对涤纶类长丝/短纤上浆具有抱和性好、渗透性强、低VOC挥发、易退浆、易降解、低/无重金属析出等优点逐步取代丙烯酸型浆料。我公司结合产品下游使用特点:使用气温及湿度变化、产品粗细不同、表面上浆要求、内部上浆要求、高含固率满足、低乙醛含量保证等,调整配方优化工艺打造高效率、高环保、高稳定的差异型环保型浆料。

海岛系列聚酯切片:包含高黏型海岛聚酯切片、中黏型海岛聚酯切片、低黏型海岛聚酯切片、水溶型海岛聚酯切片、无 系列海岛聚酯切片等。 该产品通过海、岛双组份复合纺丝、海成份溶解去除的特殊工艺纺制细旦型长丝(DTY)/短纤,单丝纤度在0.05D以下,纺制得到的产品广泛用 于防羊绒、桃皮绒、防麂皮、仿真丝、人造皮革等高档使用领域。我公司海岛系列产品涵盖高、中、低三种不同黏度特性、不同使用性能,其具 有可纺性好、热稳定性高、纺丝阻件使用周期长、海、岛组分界面清晰、低比例高效率复合、海成份易溶解、岛成份易深染等优点广受下游客户 好评。

<mark>差别化膜用系列聚酯切片</mark>:包含系列哑光膜用聚酯切片。哑光膜用产品拉膜成型后广泛用于数码喷绘基材、家具离型膜、开口剂母料、各类标签 用基膜等,我公司哑光型膜用聚酯切片包含不同二氧化硅含量、不同种类二氧化硅,生产过程通过特有助剂最大程度保证产品各组分共混的均匀 性,最终产品质量稳定、耐热性好、成膜性能强,可满足不同使用领域要求。

<mark>我公司目前正在开发的新品种</mark>:半光高收缩型聚酯切片、阻燃型聚酯切片、低熔点型聚酯切片、PETG、NPETG、太阳能背板膜用聚酯切片、低 羧基含量聚酯切片、PBAT等。

HCDP series polyester chip: It includes special cation (Persian fiber), composite high shrinkage, new modified, teyang ef (antimony free) and other varieties. The cationic modified monomer content of this variety is up to 10%. It is generally blended with recycled polyester bottle or large light to produce short fiber in 40% - 50%, which can be used in many kinds of clothing fabrics, knitwear, wool, flocking, carpet, velvet, artificial fur, etc. the products can also be mixed with nitrile fiber and wool to achieve the same bath dyeing function.

ECDP series polyester chips: including cdp2.5, ecdp3.0, ecdp4.5, Anhong, antimony free series ECDP, etc. The content of each kind of monomer can be adjusted according to the downstream demand of the product. Through many years of process optimization and equipment improvement, the downstream use of the product has the advantages of long resistance pressure-up cycle, low spinning temperature and high yield. The product is mainly used for spinning BCF filament, FDY filament or staple fiber, It is widely used in printing carpet, clothing fabric, flocking silk and other fields Water soluble polyester chips: including ordinary filament sizing water-soluble polyester chips, fine denier (Multi-f number) filament sizing water-soluble polyester chips, recycled water-soluble polyester chips, staple fiber sizing water-soluble polyester chips, non-woven fabric sizing water-soluble polyester chips, non-woven fabric sizing water-soluble polyester chips polyester chips Polyester chips, etc. Water soluble series polyester chips are endowed with water solubility by copolymerization of various modified monomers

Island series polyester chip: including high viscosity Island polyester chip, medium viscosity Island polyester chip, low viscosity Island polyester chip, water-soluble Island polyester chip, antimony free series Island polyester chip, etc. Through the special process of sea and island two-component composite spinning and sea component dissolving and removing, the product spins fine denier filament (DTY) staple fiber, and the single filament size is below 0.05d. The product is widely used in high-end application fields such as cashmere, peach skin cashmere, suede, silk imitation, artificial leather, etc. Our island series products cover high and medium

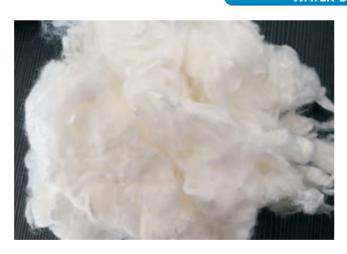
Series polyester chips for differential film: including series polyester chips for matt film. The products for matt film are widely used in digital spray painting substrate, furniture release film, opening agent masterbatch, all kinds of label base film, etc. our company's Matt film polyester chip contains different silica content and different kinds of silica. The production process ensures the uniformity of various sub blending products through special additives to the greatest extent. The final product has stable quality and good heat resistance The film-forming performance is strong, which can meet the requirements of different application fields.

Our company is currently developing new varieties: semi gloss high shrinkage polyester chip, flame retardant polyester chip, low melting point polyester chip, PETG, npetg, polyester chip for solar panel, polyester chip with low hydroxyl content, PBAT, etc.



### 水溶性PVA纤维

#### **WATER-SOLUBLE PVA FIBER**



上油率,%≥

Oil content

#### 产品介绍 / Product Introduction

**S-5** 

0.10

本公司水溶性PVA纤维产品的年产能1.5万吨,较好地解决了油剂选型,不溶物含量等影响后加工性能的技术问题,产品工艺成熟,质量稳定,各项技术指标经检测达到国际同行业先进水平,该产品通过ISO9001质量管理体系、ISO14001环境管理质量体系和OHSASI8001职业健康安全管理体系认证。

The annual production capacity of the company's water-soluble PVA fiber products is 15000 tons, which can better solve the technical problems affecting the after processing performance such as the selection of oil agent and the content of insoluble matter. The product is mature in technology and stable in quality, and its technical indicators have reached the advanced level in the same industry in the world. The product has passed the ISO9001 quality management system, ISO14001 environmental management quality system and ohsasi8001 occupational health and safety Full management system certification.

#### 水溶性PVA纤维质量指标 / Water soluble PVA fiber specification

**S-4** 

项 目Item		3-4		3-3			3-0		
规 格Noms	优等品 Superior Quality	一等品 First Grade	合格品 Qualified	优等品 Superior Quality	一等品 First Grade	合格品 Qualified products	优等品 Superior Quality	一等品 First Grade	合格品 Qualified products
线密度偏差率,% Density deviation	$\pm 6.0$	±7.0	±8.0	±6.0	±7.0	±8.0	±6.0	±7.0	±8.0
长度偏差率,% Length deviation	$\pm 4.0$	$\pm 5.0$	$\pm 6.0$	$\pm 4.0$	$\pm 5.0$	±6.0	$\pm 4.0$	$\pm 5.0$	$\pm 6.0$
溶断温度,℃≤ Melting breaking temperature		36-45			46-55			36-45	
断裂强度, cN/dtex≥ Tenacity		2.8			3.0			2.8	
断裂伸长率,% Elongation					$23.0\pm 5.0$	)			
热水不溶物,%≤ Insoluble matter in hot water	0.3	0.5	0.5	0.3	0.5	0.5	0.3	0.5	0.5
卷曲数,个/25mm≥ Crimp number					3.5				
异状纤维,mg/100g≤ Abnormal fiber	10.0	15.0	30.0	10.0	15.0	30.0	10.0	15.0	30.0
上油率,%≥ Oil content					0.10				
off content									
		S-7			S-8			S-9	
项 目Item 规 格Noms	优等品 Superior Quality	S-7 一等品 First Grade	合格品 Qualified	优等品 Superior Quality	S-8 一等品 First Grade	合格品 Qualified products	优等品 Superior Quality	S-9 一等品 First Grade	合格品 Qualified products
项 目Item	Superior	一等品		Superior	一等品	Qualified	Superior	一等品	Qualified
<b>项 目</b> Item <b>规 格</b> Noms 线密度偏差率,%	Superior Quality	一等品 First Grade	Qualified	Superior Quality	一等品 First Grade	Qualified products	Superior Quality	一等品 First Grade	Qualified products
项 目Item 规 格Noms 线密度偏差率,% Density deviation 长度偏差率,%	Superior Quality ±6.0	一等品 First Grade ±7.0	Qualified ±8.0	Superior Quality ±6.0	一等品 First Grade ±7.0	Qualified products ±8.0	Superior Quality ±6.0	一等品 First Grade ±7.0	Qualified products ±8.0
<b>项 目Item</b> 规 格Noms  线密度偏差率,% Density deviation 长度偏差率,% Length deviation 溶断温度,℃≤	Superior Quality ±6.0	一等品 First Grade ±7.0 ±5.0	Qualified ±8.0	Superior Quality ±6.0	一等品 First Grade ±7.0 ±5.0	Qualified products ±8.0	Superior Quality ±6.0	一等品 First Grade ±7.0 ±5.0	Qualified products ±8.0
<b>项 目Item</b> 规 格Noms  线密度偏差率,% Density deviation 长度偏差率,% Length deviation 溶断温度,℃≤ Melting breaking temperature 断裂强度,cN/dtex≥	Superior Quality ±6.0	一等品 First Grade ±7.0 ±5.0	Qualified ±8.0	Superior Quality $\pm 6.0$ $\pm 4.0$	一等品 First Grade ±7.0 ±5.0	Qualified products $\pm 8.0$ $\pm 6.0$	Superior Quality ±6.0	一等品 First Grade ±7.0 ±5.0	Qualified products ±8.0
项 目Item  规 格Noms                          线密度偏差率,%	Superior Quality ±6.0	一等品 First Grade ±7.0 ±5.0	Qualified ±8.0	Superior Quality $\pm 6.0$ $\pm 4.0$	一等品 First Grade ±7.0 ±5.0 76-85 3.8	Qualified products $\pm 8.0$ $\pm 6.0$	Superior Quality ±6.0	一等品 First Grade ±7.0 ±5.0	Qualified products ±8.0
项 目Item  规 格Noms  线密度偏差率,% Density deviation 长度偏差率,% Length deviation 溶断温度,℃≤ Melting breaking temperature 断裂强度,cN/dtex≥ Tenacity 断裂伸长率,% Elongation 热水不溶物,%≤	Superior Quality $\pm 6.0$ $\pm 4.0$	一等品 First Grade ±7.0 ±5.0 66-75 3.5	Qualified ±8.0 ±6.0	Superior Quality $\pm 6.0$ $\pm 4.0$	一等品 First Grade ±7.0 ±5.0 76-85 3.8 23.0±5.0	Qualified products $\pm 8.0$ $\pm 6.0$	Superior Quality $\pm 6.0$ $\pm 4.0$	一等品 First Grade ±7.0 ±5.0 86-95 4.5	Qualified products $\pm 8.0$ $\pm 6.0$
项 目Item  规 格Noms   线密度偏差率,% Density deviation 长度偏差率,% Length deviation 溶断温度,℃≤ Melting breaking temperature 断裂强度,cN/dtex≥ Tenacity 断裂伸长率,% Elongation 热水不溶物,%≤ Insoluble matter in hot water 卷曲数,个/25mm≥	Superior Quality $\pm 6.0$ $\pm 4.0$	一等品 First Grade ±7.0 ±5.0 66-75 3.5	Qualified ±8.0 ±6.0	Superior Quality $\pm 6.0$ $\pm 4.0$	一等品 First Grade ±7.0 ±5.0 76-85 3.8 23.0±5.0	Qualified products $\pm 8.0$ $\pm 6.0$	Superior Quality $\pm 6.0$ $\pm 4.0$	一等品 First Grade ±7.0 ±5.0 86-95 4.5	Qualified products $\pm 8.0$ $\pm 6.0$

# 皖维建材 WANWEI **Building Materials**

水泥&熟料

Cement& clinker

加气砼砌块

Aerated concrete block

白乳胶

White latex

可再分散性胶粉

Re-dispersible Emulsion powder

水泥&熟料

销售电话: 0551-82189469

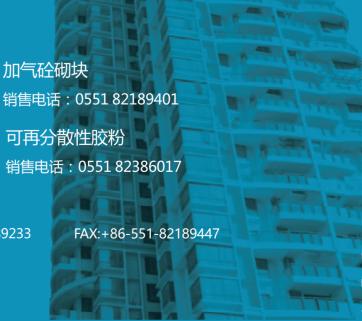
白乳胶

销售电话: 0551 82189634

FOR INTERNATIONAL BUSINESS

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E-mail:jckb2@126.com





### 水泥&熟料

**Cement & Clinker** 

#### 产品介绍/ Product Introduction



皖维水泥是利用公司生产PVA过程中产生的工业废渣而兴建起来的,其环保效益和经济效益皆十分显著,公司现有3条水泥生产线,年消化工业废渣近百万吨,年产熟料、水泥400多万吨。主要品种为42.5#、52.5#普通硅酸盐、M32.5砌筑水泥等多个种类。

anwei Cement Plant has been built under the environmental protection and good economic benefit to make use of the million tons of waste residue in the production of PVA. Now the Plant has three cement and clinker production lines which can supply 4million tons/year cement and clinker. The main varieties products of Wanwei Cement Plant are 42.5 #, 52.5 #Portland, 32.5R composite silicate, and many other species.



#### 皖维牌P.0 52.5级、P.0 42.5级、M32.5级砌筑

#### 主要性能/Main Performance

- 1、普硅水泥早期强度高凝结硬化快;
- 2、抗冻性、抗腐蚀性、耐磨性好,不透水强,工作性能优良;
- 3、各品种的富余强度高,水化热低;
- 4、需水量低,外加剂适应性强。

- 1. ordinary portland cement has the property of high early strength, fast concreting and fast concrenting and fast hardening.
- the product has the character istics of frost resistance, wear esistance and excel lent working performance
- 3. All varieties of products has the charater of hige surplus strength and low hydradtion heat
- 4. low alkali content, strong durability

#### 适用范围 / Scope Of Application

- 1、一般地上工程及受侵蚀作用的地下工程;
- 2、无腐蚀水中的受冻工程;
- 3、P.0 42.5级普硅水泥适用早期强度要求较高的工程;
- 4、P.0 52.5级普硅水泥适用于C60以上混凝土配置及要求特高的重点工程;
- 5、低温环境中需要强度发挥快的工程。

- 1. Eneral engineering works and the underground engineering works with erosio effect.
- 2. No corrosion freezing engineering in water.
- 3. P.0 42.5 grade ordinary portland cement is suitable for high strength requirements in early stage.
- $4.\ P.0\ 42.5$  grade ordinary portland cement is suitable for engineering works with the abov C60 configuration, as well
- as the engineering works with specialhigh requirments
- 5. The engineering works need to develop fast strength in low temperature environment

### 加气建筑板材

Autoclaved aerated concrete boards



#### 产品介绍 / Product Introduction

蒸压加气混凝土板材是一种以优质的硅砂或粉煤灰、生石灰、水泥等 为原料,用专利配方经严格的工艺过程和高压蒸汽养护而成的高性能轻质 建筑材料。它既可做建筑主体的内墙和外墙等墙体材料,又可做屋面板和 楼层板,另有薄板 (37mm、50mm厚) 可作保温板及防火板,是一种性 能优越的新型建材。

Autoclaved aerated concrete boards is a kind of high performance lightweight construction material made of high quality silica sand or fly ash, quicklime, cement and other raw materials. It is produced by strict technological process and high-pressure steam curing which used patented formula. It is a new building material with superior performance which can be used as wall materials such as interior and exterior walls of the main body of the building, as well as roof and floor boards. And, the sheet (37mm.50mm thick) is also can be used as insulation board and fireproof board.

#### 产品优点\ Product advantages

绿色环保:产品主要原材料为石英砂(粉煤灰)、石灰、水泥, 无放射性,在高温下不会产生有毒气体,使用健康、安全,是国 家大力推广的绿色建材产品。

保温隔热:在含水量为0时, ALC材料的导热系数λ=0.13 W/(m.k)。它仅为标准砖的1/6-1/7,为混凝土的1/10-1/11。

防火阻燃:产品原材料及产品本身均为无机物,绝不燃烧,在高温和明 火下化学稳定性和体积稳定性也好,防火性达到国家一级防火标

隔音降噪:产品内部结构像面包一样,均匀分布着大量封闭气孔,具有 -般建筑材料所不具备的吸音和隔音双重效果。

抗渗防潮:产品内部均匀分布的封闭孔,直径约为1-2mm,更能有效 阻止水分子的扩散和渗透,具有抗渗防潮作用。

轻质高强:产品容重为600kg/m3左右,为粘土砖的1/4,灰砂砖的 1/3, 混凝土的1/5。同时产品强度同比其他传统建筑材料高出  $30 \sim 40\%$ .

施工便捷:产品外形尺寸精确,长、宽、高方向公差在±2mm,远优于 传统建筑材料,产品像木材一样易于加工。

降低造价:由于产品使用轻质高强,可以有效减轻建筑物自重,大大 低建筑基础和结构投资和用人成本。

The main raw materials of the products are quartz sand (fly ash), lime and cement. This product has no radioactive, it will not produce poisonous gas under high temperature. The product is healthy and safe to use, it is a green building materials product promoted vigorously by our country.

Heat preservation and Heat insulation:

When the water content is 0, the thermal conductivity of ALC material is  $\lambda$ =0.13 W/(m.k), It is only 1/6-1/7 of the standard brick and 1/10-1/11 of the concrete. Fire prevention and inflaming retarding:

The raw materials and products are inorganic and never combustion. It has the advantages of good chemical stability and volume stability under high temperature and open fire. The fire resistance of the product has reached the national fire standard.

Sound insulation and noise reduction

The internal structure of the product is like bread, evenly distributed with a large number of closed pores. The product has the double effect of sound absorption and sound insulation which the general building materials do not

Impermeable and moisture proof:

The closed holes with a diameter of about 1-2mm are evenly distributed inside the product, so the product can more effectively prevent the diffusion and penetration of water molecules, has impermeable moisture proof function light weight and high strength

The volume weight of the product is about 600kg/m3, which is 1/4 of the clay brick, 1/3 of the gray sand brick and 1/5 of the concrete. Meanwhile, the strength of the product is 30 ~ 40% higher than other traditional building materials.

Convenient construction:

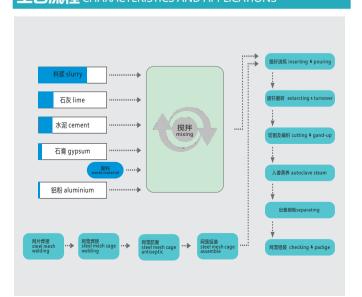
The external dimension of the product is accurate, and the tolerance of length, width and height is ±2 mm, which is better than traditional building materials. The product is very easy to process as same as wood

Because the product has the advantages of light weight and high strength, it can effectively reduce the weight of the building, thus greatly reducing the investment of the building foundation and structure as well as the cost of employing people.

#### 一品指标 CHARACTERISTICS AND APPLICATIONS

#### 产品名称 蒸压加气混凝土板材 APPLICATIONS 6.0×1.2×0.6 m³/模,板材尺寸按要求切割 产品规格 The size of the sheet should be cut as requirement Product specification 600 Kg/m³ (根据丁艺配方控制) 产品重量 Control according to process formulation Product weight 出釜抗压强度 平均值(Average value) 3.5MPa 干燥收缩值 快速法条件下测定<0.8mm/m:标准法条件下测定<0.5mm/m Drying shrinkage value Measured under rapid method conditions 抗冻性 冻融循环15次后,重量损失≤5%,强度损失≤20% After 15times of freeze-thaw cycles, weight loss is ≤5%, strength loss is ≤20% Frost resistance ≤0.13-0.16W/m.k 蒸压时间 12小时 Autoclaved time 工作压力 1.3Mpa Work Pressure

#### 工艺流程 CHARACTERISTICS AND APPLICATIONS





### 加气砼砌块

**AERATED CONCRETE BLOCK** 

#### 产品介绍 / Product Introduction

巢湖皖维金泉实业有限公司生产的加气混凝土砌块是以磨细的石英砂、粉煤灰、水泥、石灰、铝粉和石膏为主要原料,经过配料浇注和高温(180-195℃)高压(13个标准大气压)下养护制成的细密多气孔轻质加气混凝土制品,既可形成砌块,有可形成板材;既可以做成墙体材料,又可做层面板,楼板。灰加气A3.5、BO6,砂加气A5.0、BO6两个类别四个品种产品通过了安徽省住宅产业化促进中心组织的建设领域新技术新产品推广项目评估。蒸压加气混凝土砌块(灰)B06和蒸压证书。

Aerated concrete block, which is produced by Chaohu Wanwei Jinquan Industrial Co.,Ltd,is the fine porosity of lightweight aerated concrete products. It is produced by ground fine quartz sand,fly ash, cement,lime,aluminium powder and gypsum as main raw materials, after pouring ingredients and high temperature (180-195°C) and high pressure (13 standard atmospheric pressure). It can form the block and also can form the plate; It can be made into wall materials and also can be made into level board and floor. Four products of ash aeration A3.5, B06, sand aeration A5.0 and B06 have passed the evaluation of new technology and new product promotion project in the construction field organized by Anhui Residential Industrialization Promotion Center. Autoclaved aerated concrete block (asnh)B06,B07, had obtained jiangsu province new wall material product identification certificate.

















## 院维产品 WANWEI COMPANY PRODUCTS

### 白乳胶

#### WHITE LATEX

#### 产品介绍/ Product Introduction

本产品系高分子聚合物,以聚乙烯醇(PVA)为保护胶体,以醋酸乙烯、丙烯酸类为主要原料合成的高分子共聚物,无毒,无异味,对人体无害。干燥快、粘合力强、抗冻性能强、耐水性好。适用于家具制造业及装饰装修业。对纤维板、装饰板、木器等有很强的粘合力,在纸制品,纺织品、建筑领域等广泛应用。可直接粘合,自然干燥及加热干燥均可。

公司现年生产1.5万吨的聚醋酸乙烯乳液,产品包括八大系列、四十多个品种,注册商标有"皖维"牌、"巢湖"牌。产品行销全国各地,并远销国际市场。

This product is a kind of high molecular polymer, with polyvinyl alcohol (PVA) as the protective colloid, with vinyl acetate, acrylic acid as the main raw material synthesis of high molecular copolymer, non-toxic, odorless, harmless to human body. Fast drying, strong adhesion, frost resistance, good water resistance. Suitable for furniture manufacturing and decoration industry. It is widely used in paper products, textiles, construction and other fields because of its strong adhesion to fiberboard, decorative board and wood ware. Can be directly bonded, natural drying and heating drying can be.The company now produces 15,000 tons of polyvinyl acetate emulsion, including eight series and more than 40 varieties, with the registered trademarks of "Wan-Wei" and "Chaohu". Our products are sold all over the country and exported to the international market.







#### 产品的应用领域/ Applications of the product

<mark>纸管胶</mark> 该产品对纸张有较强的粘结力,干燥时间短.粘结强度高,广泛应用于纸管、蜂窝板、纸护角等纸制品的粘结。

WW-D型 该系列产品为聚乙烯醇、改性聚醋酸乙烯体系,无醛环保,该产品干燥速度快,粘接强度高。广泛应用于羽毛球球头粘接,高档实木 粘接接枝板接枝粘接,木皮冷贴、热压等。

WW-E型 该系列产品为聚乙烯醇、改性聚醋酸乙烯体系,无醛环保。该产品压合时间短,干燥快,强度特别高。广泛应用于高档实木粘接,接枝板 接枝粘合等,还可用作复配低档白乳胶、涂料原料。

WW-A型 该系列产品为聚乙烯醇与聚醋酸乙烯体系,广泛应用于纸张粘接,建筑用刮大白,墙纸贴合等粘接。

WW-B型 该系列产品为聚乙烯醇与聚醋酸乙烯体系,无醛环保。广泛应用于纸张粘接,建筑用刮大白,墙纸贴合,木材压板等粘接。

WW-B型 该系列产品为聚乙烯醇与改性聚醋酸乙烯体系,无醛环保,该产品具有成膜透明,固化速度快,粘接强度高等特点,广泛应用于木板压合、木材粘接,装潢用贴绷带等。

<mark>WW-C型(拼板专用)</mark> 该系列产品为聚乙烯醇、聚醋酸乙烯与丙烯酸共聚物体系,无醛环保,该产品固化速度快,粘接强度高,粘接层韧性好, 广泛应用于高档家具制造。

**WW-C型(贴皮专用)** 该产品为聚乙烯醇、聚醋酸乙烯、VAE改性体系,无醛环保,可常温下固化,也可热压固化,热压温度小于120℃。粘接层 具有较好韧性和耐水性且不易老化。广泛应用于木皮贴合,高档家俱实木粘接。

Paper tube adhesive this product has a strong bond to paper, short drying time, high bond strength, widely used in paper tube, honeycomb board, paper corner and other paper products bond.

WW-D series products are polyvinyl alcohol, modified polyvinyl acetate system, environmental protection, the product drying speed is fast, high bonding strength. Widely used in badminton ball head bonding, high-grade solid wood bonding, grafting board grafting bonding, wood veneer, hot pressing, etc.

WW-E series products are polyvinyl alcohol, modified polyvinyl acetate system, free of aldehyde environmental protection. The product has short pressing

WW-E series products are polyvinyl alcohol, modified polyvinyl acetate system, free of aldehyde environmental protection. The product has short pressing time, quick drying and high strength. Widely used in high-grade solid wood bonding, grafting board bonding, etc., can also be used for compounding low-grade white latex, coating raw materials.

WW-A series of products are polyvinyl alcohol and polyvinyl acetate system, widely used in paper bonding, building white scraping, wallpaper bonding, etc.

WW-B series of products are polyvinyl alcohol and polyvinyl acetate system, aldehyde - free environmental protection. Widely used in paper bonding, building white scraping, wallpaper bonding, wood pressing plate bonding.

WW-B1 series of products for polyvinyl alcohol and modified polyvinyl acetate system, aldehyde - free environmental protection, the product has the characteristics of transparent film formation, fast curing speed, high bonding strength, widely used in wood pressing, wood bonding, decoration bandage and so on.

WW-C type (for assembly) products are polyvinyl alcohol, polyvinyl acetate and acrylic acid copolymer system, free of aldehyde and environmentally friendly, the products have fast curing speed, high bonding strength and good adhesion layer toughness, widely used in high-grade furniture manufacturing.

WW-C (special for skin coating) products are polyvinyl alcohol, POLYvinyl acetate, VAE modified system, free of aldehyde environmental protection, can be cured at room temperature, or hot pressing temperature is less than 120?. The adhesive layer has good toughness, water resistance and not easy aging. Widely used in veneer bonding, high-grade solid wood furniture bonding.



### 可再分散乳胶粉

**REDISPERSIBLE EMULSION POWDER** 

#### 产品介绍/ Product Introduction



可再分散乳胶粉产品是公司利用自身PVA原料和技术优势,引进丹麦先进的Niro公司喷雾干燥技术和装置,运用DCS和PLC系统控制生产的新型建材。该产品具有高柔韧性、高耐候性和对各种基材的高粘结性,是干混沙浆中重要的添加剂,能提高建筑材料的弹性、弯曲强度及抗折强度,减少收缩率,有效防止开裂。现具备年生产能力4万吨,是目前中国最大的可再分散乳胶粉生产企业之一

the Redispersible Emulsion power is a kind of new building material produced by the method of spray drying which is imported by Niro company in denmark, the process adopted PLO and DOS control system. As high flexbility, high weather resistance ande high adhesion to various substrates, it is an important drymixed mortar additive which can enhandce the flexibility bending strength of building materials effective to prevent cracking. Chinese annual production capacity is 40000 tons, now wanwei company is one of the largest manufacturing enterprises of the redispersible powder.

#### 产品规格

/ HH /201H									
指标Index 型号Model 项目Item	WWJF- 8010	WWJF- 8020	WWJF- 8030	WWJF- 8040	WWJF- 8050	WWJF- 8060	WWJF- 6010		
不挥发物,%≥ NON-VOLATILE	98.0	98.0	98.0	98.0	98.0	98.0	98.0		
堆积密度,g/L BULK DENSITY	450-600	450-600	450-600	450-600	450-600	450-600	450-600		
灰分(灼烧残渣),% ASH	$12 \pm 2$	16±2							
最低成膜温度,℃ MINIMUM FILM FORMING				M±2					
玻璃化温度,℃ GLASS TRANSITION TEMPERATURE				$N\pm 2$					
平均粒径(DO5), μm AVERAGE PARTICLE SIZE	80-120	80-120	80-120	80-120	80-120	80-120	80-120		
细度(≥300μm), % ≤ FINENESS	2	2	2	2	2	2	2		
Ph值 PH VALUE	6-8	6-8	6-8	6-8	6-8	6-8	6-8		

注: M和N由各生产厂家根据产品性能情况确定相应值。

指标Index 型号Model 项目Item	WWJF-8011	WWJF-8013	WWJF-8025	WWJF-8045	WWJF-8062	WWJF-602	
不挥发物,%≥ NON-VOLATILE	98.0	98.0	98.0	98.0	98.0	98.0	
堆积密度,g/L BULK DENSITY	450-600	450-600	450-600	450-600	450-600	450-600	
灰分(灼烧残渣),% ASH	$12\pm 2$	12±2	12±2	$12\pm 2$	12±2	16±2	
最低成膜温度,℃ MINIMUM FILM FORMING	$\mathtt{M}\!\pm\!2$						
玻璃化温度,℃ GLASS TRANSITION TEMPERATURE	$N\pm 2$						
平均粒径(DO5),μm AVERAGE PARTICLE SIZE	80-120	80-120	80-120	80-120	80-120	80-120	
细度 (≥300 μm), % ≤ FINENESS	2	2	2	2	2	2	
Ph值 PH VALUE	6-8	6-8	6-8	6-8	6-8	6-8	
注 MENN由女生立厂完担提立具件的体况确定担应估							

注: M和N由各生产厂家根据产品性能情况确定相应值。

# 皖维新材料 WANWEI New Material

PVA膜

**PVA Film** 

PVB树脂

**Polyvinyl Butyral Resin** 

膜级 PVB树脂

Film Class PVB Resin

PVA膜 PVA Film

PVB树脂、膜级 PVB树脂

PVB Resin、Film class PVB Resin

销售电话: 0551 82189593 销售电话: 0551 82189406

FOR INTERNATIONAL BUSINESS

TEL:+86-551-82189406 +86-551-82189233 FAX:+86-551-82189747

E-mail:jckb2@126.com



# PVA膜 --

#### 产品介绍 / Product Introduction

聚乙烯醇薄膜(简称PVA膜)是以皖维自产聚乙烯醇为原料,经溶解、挤出、涂布、干燥后成膜。最大成品宽幅1.6米,厚度30-75μm,具有良好的力学、光学性能。光学薄膜与三醋酸纤维素膜(TAC膜)复合后,用于TN、STN、TFT等液晶显示及偏光眼镜用偏光片的制造。低温水溶膜可用于塑料、陶瓷等制品表面水转印印刷。

Polyvinyl alcohol film (PVA film for short) is made from polyvinyl alcohol produced in Wanwei, which is dissolved, extruded, coated and dried into a film. The maximum width of the finished product is 1.6 meters, the thickness is 30-75 m, with good mechanical and optical properties. Optical film and cellulose triacetate film (TAC film) compound, used in TN, STN, TFT liquid crystal display and polarizing glasses polarizing film manufacturing. Low temperature water soluble film can be used for plastic, ceramic and other products surface water transfer printing.



项 [	指 标Index		
长度偏差(Length Deviation) , n		+20, -0	
宽度偏差(Width deviation),mm		+4, -0	
厚度	平均厚度(average thickness), um	$\mathtt{M}\pm2.0$	
thickness	厚度极差(thickness range), um ≤	3.0	
热水溶断温度(Dissolution t	67.0M±1.5		
完全溶解温度(Complete d	$74\pm3$		
含湿量(moist	4.0±1.0		
膨润度(swelling capacity),% ≤	TD(横向)	125	
廖何友(Swelling capacity),//	MD(纵向)	120	
溶出量(dissolving-ou	200		
拉伸断裂强度(tensile breaking	TD (横向)	≥60	
strength), MPa	MD(纵向)	>00	
此刻仙忆麻(ru · · ) 0/	TD(横向)	≥400	
断裂伸长度(Elongation),%	MD(纵向)	<i>≥</i> 400	
透光率(light tran	90.0		
雾度(Harizo	1.0		
增塑剂含量(Pla	10.0±2.0		
表观质量(a	合格(Pass)		

### 粘合剂级PVB树脂

Adhesive grade PVB resin

#### 产品介绍 Product Introduction

聚乙烯醇缩丁醛树脂(简称PVB)是由聚乙烯醇与丁醛进行缩合反应 而成的合成树脂,可溶于甲醇、乙醇、酮类、芳烃类溶剂,具有较 高的透明性,良好的耐寒性,抗冲击性能。与玻璃、陶瓷、金属 等有良好的粘接性。

Polyvinyl butyral resin (PVB) is the synthertic resin composed of PVA and butyl aldehyde with condensation reaction. It could be solubie in methanol, ethanol, acetone, aromatic solvents, It has high transparency, good cold resistance and impact resistance, as well as the good adhesion with glass, ceramic, metal and so on.



#### 应用范围 Application Scope

该产品广泛运用于纸基覆铜板,热转印油墨、水松纸油墨、金属保护底漆、羽毛球胶水,陶瓷花纸、铝箔胶、电子陶瓷、丝网印刷油墨、铸造及草帽胶、纤维处理剂以及人造海绵等领域。

This product is widely used in paper base copper clad, thermal transfer ink, cypress paper printing ink, glue metal protection primer, badminton, ceramic color paper, aluminum foil adhesive, electronic ceramics, silk screen printing ink, casting and resin grinding wheel, straw hat, fiber treating agent and cellulose sponge, etc.

#### 产品指标 Products indicators

一面面面外 Products Indicators												
项目 型号	<b>外 观</b> Appearanc e	挥发分 % Volatile	粘度(涂- 1粘度计 法),S Viscosity (-1 viscometer method	氯化氢, %, ≤ Hydrogen chloride	Transp	阴度 parency 600nm, ≥	堆积密 度,g/ml Density, g/ml	<b>羟基,%</b> Hydroxyl	乙酰氧 基,% Acetoxy	缩丁醛 基,% Butyrdsf	粘度(旋转粘 度计法 mpa.s) Viscosity (rotational viscometer method MPa. S)	<b>灰分 ,%</b> Ash, %
WW-A-10	白色粉末	€3.0	3~5	0.01	90.0	94.0	0.18~ 0.26	19.0~ 23.0	2.0~4.0	73.0~ 79.0	40~70	0.05%
₩₩-A-20	白色 粉末	<b>≤</b> 3.0	5~10	0.01	92.0	96.0	0.20~ 0.26	19.0~ 23.0	2.0~4.0	73.0~ 79.0	70~140	0.05%
₩₩-A-30	白色粉末	<b>≤</b> 3.0	10~18	0.01	93.0	97.0	0.20~ 0.26	19.0~ 23.0	2.0~4.0	73.0~ 79.0	140~250	0.05%
WW-A-40	白色粉末	<b>≤</b> 3.0	18~30	0.01	93.0	97.0	0.20~ 0.26	19.0∼ 23.0	2.0~4.0	73.0~ 79.0	250~420	0.05%
WW-A-50	白色粉末	≤3.0	30~60	0.01	94.0	98.0	0.20~ 0.26	19.0~ 23.0	1.0~3.0	74.0~ 80.0	420~840	0.05%
WW-A-60	白色粉末	≤3.0	60~180	0.01	94.0	98.0	0.20~ 0.26	19. 0∼ 23. 0	1.0~3.0	76.0~ 81.0	840~ 2500	0.05%
WW-A-70	白色粉末	<b>≤</b> 3. 0	>180	0.01	94.0	98.0	0.20~ 0.26	19.0~ 23.0	1.0~3.0	76.0~ 81.0	>2500	0.05%



### 膜级 PVB树脂

Film grade PVB resin

#### 产品介绍 Product Introduction

皖维公司的膜级PVB树脂产能为1万吨/年,该产品制造的PVB薄膜用于制作安全玻璃的夹层材料,透明性好,抗冲击强度大,以及优良的抗穿透性,广泛用于航空、汽车和高层建筑安全玻璃。

The production capacity of Wanwei company film grade PVB resin is 10000 tons/year. The production PVB film produced by film grade PVB resin is used for making safety glass interlayer, Materia. It has excellent transparency, Impact resistance strength, Penetraton resistance, Widely used in aerospace, Automotive and high-rise building safety glass.







#### 产品指标 Products indicators

/ BDJATOV Flourices indicators									
指标Index 等级	优等品 Superior products	一等品 First Grade products	合格品 Qualified products						
外观 Appearance	白色粉末,无可见杂质 White powder, No visible impurity								
挥发分,%, ≤ Volatile	2.0								
羟基,% Hydroxyl	17.0-20.0								
氯化氢,%,≤ Hydrogen chloride,	0.01								
粘度 mpa.s Viscosity	190-280								
透明度,% Transparency	≥94.0 (430nm波长);≥97.0 (660nm波长) ≥94.0 (430nm);≥97.0 (660nm)								
熔融指数(120℃、21.6kg) g/10min Melt Index	0.80-2.20								
雾度, %, ≤ Haze	0.30	0.40	0.60						
透光度,%,≥ Transmittance	88.0								
堆积密度,g/cm³,≥ Density,g/m³	0.200								

注:上述指标也可根据客户需要在合同中另行确定

### PVB膜

**PVB film** 

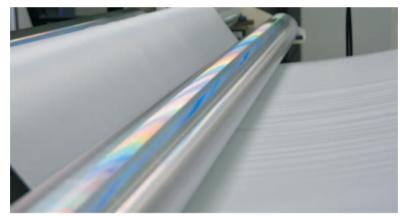
#### 产品介绍 Product Introduction

PVB中间膜是半透明的薄膜,由聚Z烯醇缩J醛树脂经增塑剂塑化挤压成型的一种高分子材料。外观为半透明薄膜,无杂质,表面平整,有一定的粗糙度和良好的柔软性,对无机玻璃有很好的粘结力、具有透明、耐热、耐寒、耐湿、机械强度高等特性,是当前世界上制造夹层、安全玻璃用的最佳粘合材料,同时在建筑幕墙、招罩棚、橱窗、银行柜台、监狱探视窗、炼钢炉屏幕及各种防弹玻璃等建筑领域也有广泛的应用。

PVB interlayer is translucent membrane, by polyviny| butyral

resin after plasticizer plasticizing extrusion forming of a kind of polymer material. Appearance as semi-transparent film, without impurities, with smooth surface, has a certain roughness and good softness, with inorganic glass has good adhesive power, transparent, heat-resistant, cold resistant, resistant to wet and mechanical strength highercharacteristic, It is the world manufacturing laminated, safety glass which widely used to be the best adhesive materials in building curtain wall, recruit, window, bank counter, prison tent out of Windows, and various kinds of

技术参数和物理特性 THE MAIN TECHNICAL PARAMETER OF PRODUCT







#### 产品指标 Products indicators

边锤测试/Test of strike

宽度偏差/Deviation of width

#### 比重/Density 1.069g/cm<sup>3</sup> 诱光率/Transmittance ≥88.5% (注/Note 1) 折射指数/Refractive Index 1.47-1.50 (注/Note 1) 拉伸强度/Tensile Stre (注/Note 2) ≥20Mpa 断裂伸长率/ elongation at break ≥200% (注/Note 2) 0.35-0.55% (注/Note 3) 含水率/Moisture 收缩率/Ration of shrinkage < 6% (注/Note 4)

3-9

(注/Note 1)

名义值/expected value +10 mm

#### 说明:

- 1、由2mm无色玻璃+ 0.38mm中间膜+ 2mm无色玻璃条件下测得。.
- 2、在20°C,相对湿度40%条件下测得。
- 3、根据要求可做调整。
- 4、在60°C,相对湿度40%条件下,放置15分钟后测得。
- 5、汽车用和建筑用中间膜此数据不同,样品在-18°C,放置1小时后测得。

#### Note:

- 1. Measurement under conditions of Colorless glass (2mm)+interlayer film (0.38) +Colorless glass(2mm)
- 2. Measurement under conditions of 20  $^{\circ}\text{C}$  and 40% relative humidity
- 3. It is be able to adjust according to customer's requirment's.
- 4. Measurement after 15 minutes under the conditions of 60  $^{\circ}\text{C}$  and 40% relative hunmidity.
- 5. The date of interlayer film of HI (Automotive windshields) and ST (Architectural glass) are different, both samples should be tested with -18 °C after 1 hours.



### Innovation Win the Future

站在新的起点,皖维集团秉承弘德、进责、笃严、求新精神,以创新为动力,以市场为导向,以效益为中心,坚持巩固主业,不断延伸产业链、拓宽产业面的发展战略,夯实"一体两翼"发展布局,全力打造化工、化纤、新材料三大产业,构建安徽本部、广西、内蒙古三大基地。全面实施品牌发展战略,开辟集约化、规模化营销网络,持续提升核心竞争力。积极响应国家"一带一路"战略,发挥品牌和技术优势,坚持走出去发展,抢滩国际市场,拓展发展空间。立足煤化工为主体,打造生物质化工、精细化工、高新材料一体化的发展格局,以技术、市场、资本为支撑,推动新型工业化发展之路。加快跨行业发展步伐,提升发展质量和能力,增强发展品质和活力,努力把皖维打造成资本扩张型、规模效益型、资源节约型、环境友好型、行业主导型的世界一流"品质皖维"。

standing on a new starting point, adhering to the "Science, Responsibility, strict, Innovation" spirit, taking the innovation as the driving force, the market as the guidance, the benefit as the center, Wanwei further strengthen the development layout of "one pair of wings", insist on consolidating the main industry, constantly extending the industrial chain, broadening the industrial development strategy. Making full efforts to build three major industries: chemical, liber and new material, and build three producing base: Anhui, Guangxi and Inner Mongolia. Wanwei institute the brand development strategy, open up the intensive and large-scale marketing network, continuously enhance the core competitiveness, Wanwei responses positicely the initiative of the Silk Road Economic Belt and the 21st-Century Maritime Silk Road", insist on "go global" strategy. make full use of brand asvantage, to enter the international market and expand the space fot development. Wanwei takes the coal chemical industry as the main part, establishen the development pattern of biological chemical industry, fine chemical industry and high-tech material integration. Supported by technology, market and capital, Wanwei promote the development of new type of industrialization, accelerate the pace of development of the industry, enhance the quality, capacity and vitality of development. Wanwei people strives to build our company into a world-class enterprise with capital expansion, scale efficiency, resource conservation, environmental friendly.



### 完维产品/WANWEI

### 合肥德瑞格光电科技有限公司

Hefei Derrig Optoelectronics Co., Ltd



合肥德瑞格光电科技有限公司成立于2017年,注册资本12000万元。为安徽 皖维高新材料股份有限公司与安徽居巢经济开发区投资有限公司共同投资设立的公司,其中皖维高新投资8400万元,占70%;居巢投资公司投资3600万元,占30%,主要从事偏光片产品的研发、生产及经营。

公司坐落于中国五大淡水湖之巢湖,北依京福高铁,合武、合宁动车,合巢芜高速公路,南靠淮南铁路运输动脉,东近长江黄金水道,交通十分便捷。公司位于合宁芜经济圈中心地带,依托具有活力的长三角市场,地缘经济优势明显。国务院批准设立皖江城市带承接产业转移示范区、合芜蚌自主创新示范区,更为公司快速发展创造无限广阔空间。

公司自韩国引进全套偏光片生产设备,年产碘系偏光片700万平方米,幅宽为1490mm。产品可应用于电视、显示器、笔记本电脑、手机、仪器仪表、车载显示、可穿戴显示、3D眼镜、偏光太阳眼镜等领域,可以满足客户高中低端不同层次的需求。同时还可根据客户需求,自主研发具有防眩、超广视角、高透过率等功能性产品。





Hefei Derrig Optoelectronics Co., Ltd is established in 2017, the regisitered capital is 120 million yuan. The company is joint invested by Anhui Wanwei Updated High-Tech Material Industry Co., Ltd and Anhui Juchao Economic development Zone Investment Co., Ltd, the amount which Wanwei invested is 84 million yuan, the percentage of total assets is 70%, and the amount which Juchao investment company invested is 36 million yuan, the percentage is 30%. The main business of Derrig company are engaged in Polarizer R&D, production and management.

The company is located in Chaohu city which is one of the five biggest freshwater lakes in China. The transportation is very convenient, on the north lies Beijing-Fuzhou High-Speed Railway and Hefei-Chaohu-Wuhu High-Speed Road, on the south lies Huainan Railway, on the east lies Changjiang golden watercourse. The company is in the center of HE-NING-WU economic cirles, relied on the dynamic Yangtze River Delta region, the Geographical advantages are obvious. The State Council permitted to establish industrial transfer demonstration region of the city-cluster along the Yangtze River in Anhui, Hefei Wuhu Bengbu independent innovation demonstration zone, it creates unlimited space for the company's rapid development

The company imports the whole production line from South Korea, the capacity of iodide polarizer is 7 million square meters, the breadth is 1490 mm. The products can be applicated in television, display, laptop, mobile, instrumentation, car monitor, wearable display, 3D glasses, UV polarizing glasses and so on, it can be satisfied different demands. And according to the customers' requirements, it also can be self-developed to the new fuctional products which has anti-glare, ultra-wide, high transmittance.





### 企业精神

**Enterprise Spirit** 

弘德 求新

Morality

Responsibility Honesty

Innovation



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蒙维公众号



广维公众号