





华光UV墨水  
Huaguang UV Ink  
神彩尽在其中  
All Magic Color Involved

## 华光神彩UV墨水闪亮震撼登场 中国制造高端喷墨技术更胜一筹

我国自主开发的高品质玻璃陶瓷免底漆UV墨水，由北京神彩优维喷墨材料科技有限公司历时5年研发成功，并同乐凯华光印刷科技有限公司联合生产推向市场。它标志着我国不能生产高科技含量UV高端喷绘墨水的历史宣告结束。

“优维”牌玻璃陶瓷免底漆UV墨水，与国外同类产品相比优势在于：可以一次性实现玻璃、陶瓷表面的直接喷绘，免去了传统底漆处理工艺，达到节能降耗、简化工序的目的；低粘度，无需加热到45℃以上即可喷绘，有利于延长喷墨头寿命，降低电路控制系统故障率；在多种特殊基材上具有高附着力；产品的自身稳定性以及在各种基材上表现出的高清晰度，可与国外任何一种品牌的UV墨水相媲美。

“优维”牌玻璃陶瓷免底漆UV墨水广泛适用于赛尔、柯尼卡、精工、东芝和Spectra等多种型号的工业级喷头连续高速喷绘和喷印。

### Huaguang Shencai UV Ink Shiny Shocking Debut Superior High-Quality Ink-jet Technology In China

It took Beijing Shencai Youwei Ink-jet Materials Technology Co., Ltd 5 years to successfully develop the high-quality primer-free glass and ceramic UV ink-jet ink and promoted to the market joint with the Lucky Huaguang Graphics Technology Co., Ltd. It puts an end to the history in which China cannot produce high-quality UV ink-jet ink.

"Youwei" brand of primer-free glass and ceramic UV ink-jet ink has following advantages: It could be ink-jet printed directly onto the surface of glass and ceramic without the conventional primer treatment process, reducing the energy consumption and simplifying the processing; It has amazingly low viscosity for ink-jet printing without need to be heated to 45 °C, providing a guarantee to extend the life time of print nozzle and reducing the failure possibility of circuit control system; It also has spectacularly high adhesion on a variety of substrates, together with its high-definition and stability on various substrates.

"Youwei" primer-free glass and ceramic UV ink-jet ink is widely applicable in continuous high-speed ink-jet printing and various types of industrial ink jet nozzles such as XAAR, Konica, SPT, Toshiba and Spectra.

## “优维”玻璃陶瓷免底漆UV墨水

### "Youwei" primer-free glass and ceramic UV ink



● 玻璃陶瓷免底漆UV墨水  
"Youwei" primer-free glass  
and ceramic UV ink

不同基材的材质结构、致密度和表面极性各不相同，因此需要对UV墨水进行科学的性能匹配，才能满足喷绘产品的最佳效果。“优维”牌UV墨水综合了不同材料的特点，开发出了相应的产品，并进行了长达一年的精细化工业喷绘实验，可以达到最佳使用效果。

Different substrates have different chemical structure, density and surface polarity, thus requiring UV ink matches those performances scientifically to present the best printing results. Youwei UV ink-jet inks with different formulations for various substrates conducted a year-long fine industry ink-jet printing experiment to achieve the best results.

## UV墨水专用玻璃陶瓷表面清洁剂

### UV ink Surface Cleaner for Substrate of Glass and Ceramic

针对不同基材的特点，为了达到最佳效果而开发的专用基材清洁剂可以使“优维”牌玻璃陶瓷免底漆UV墨水的最终使用效果得到进一步的提高。该清洁液具有以下显著优点：无毒，对身体无伤害；使用方便，无需追加设备；对玻璃、瓷砖表现形貌无任何影响，真正实现无底漆玻璃、陶瓷喷绘油墨的良好附着。

Toward characteristics of different substrates, in order to achieve the best results, we have developed UV ink surface cleaner for special substrate, which could further improve the ultimate effect of the ink. The cleaner has the following significant advantages: non-toxic, no harm to human bodies; easy to use, without additional equipment; without effect to the surface morphology of glass and ceramics, good adhesion to glass and ceramics.



● UV墨水专用玻璃陶瓷表面清洁剂  
UV ink Surface Cleaner for  
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## “优维”牌玻璃陶瓷免底漆UV墨水产品概况

### Introduction Of Youwei Primer-Free Glass and Ceramic UV ink-jet Ink

高品质UV墨水的关键技术指标包括：墨水粘度、附着力、清晰度和适应性等。“优维”牌UV墨水在不同基材上，与国外同类产品相比在以上方面更胜一筹。

- **粘度低：**可以降低喷头的加热温度，有效延长喷头的使用寿命。
- **附着力好：**在玻璃陶瓷基材上可以实现一次性快速喷绘，且具有较好的附着力。
- **清晰度高：**可以实现更高精度的喷绘。
- **适应性广：**广泛适用于多种型号的喷头。
- **耐高温：**固化膜层可以耐受200°C以上高温处理而无任何变色或褪色现象，且不影响附着力。

The key properties of high-quality UV ink-jet ink include: the ink viscosity, adhesion, definition and adaptability. Performance of Youwei UV ink-jet Ink on different substrates is superior.

- **Low Viscosity:**  
It can reduce the heating temperature of the nozzle, thus effectively extending the life time of nozzle.
- **Fair Adhesion:**  
It can achieve one-time fast ink-jet printing on glass and ceramic substrate with good adhesion.
- **High Definition:**  
It can achieve more accurate ink-jet printing.
- **Wide Adaptability:**  
It can be widely used in many types of nozzles.
- **High Temperature Resistance:**  
Cured coating can withstand temperature above 200 °C without any discoloration or bleaching or decrease of adhesion.

## “优维”牌UV墨水在玻璃、陶瓷基材上,与国外同类产品的对比实验数据

Control experimental data of “Youwei” UV ink and similar foreign products on glass, ceramic substrates

### 玻璃、陶瓷基材附着力对比

UV墨水品牌		日本某品牌	英国某品牌	美国某品牌	“优维”牌UV墨水	
基材及处理方式						
玻璃	新固化膜层	不划格	20%	0%	0%	100%
		划格	0%	0%	0%	100%
	在水中浸泡 24h	不划格	0%	0%	0%	100%
		划格	0%	0%	0%	100%
	200°C 烘烤 30min	不划格	0%	0%	0%	100%且无变色现象
		划格	0%	0%	0%	100%且无变色现象
陶瓷	新固化膜层	不划格	0%	0%	0%	100%
		划格	0%	0%	0%	100%
	在水中浸泡 24h	不划格	0%	0%	0%	100%
		划格	0%	0%	0%	100%
	200°C 烘烤 30min	不划格	0%	0%	0%	100%且无变色现象
		划格	0%	0%	0%	100%且无变色现象

注: 表中百分比为用百格刀划格或未划格时采用3M胶带测试后, 基材上残存膜层占原膜层面积的膜层剩余百分比。100%表示膜层未被粘掉, 0%表示膜层全部被粘掉。

### Adhesion comparison of glass and ceramic substrate

UV Ink Brand		Brand of Japan	Brand of UK	Brand of US	Youwei UV Ink	
Substrate & Processing						
Glass	Cured coat	No cross cut	20%	0%	0%	100%
		Cross cut	0%	0%	0%	100%
	Soaking in water for 24h	No cross cut	0%	0%	0%	100%
		Cross cut	0%	0%	0%	100%
	Baking in 200°C for 30min	No cross cut	0%	0%	0%	100%& No discoloration
		Cross cut	0%	0%	0%	100%& No discoloration
Ceramic	New curing coat	No cross cut	0%	0%	0%	100%
		Cross cut	0%	0%	0%	100%
	Soaking in water for 24h	No cross cut	0%	0%	0%	100%
		Cross cut	0%	0%	0%	100%
	Baking in 200°C for 30min	No cross cut	0%	0%	0%	100%& No discoloration
		Cross cut	0%	0%	0%	100%& No discoloration





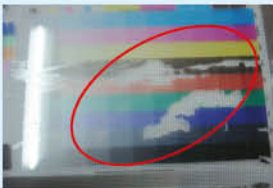





Note: Percentage in the table means the remaining film ratio out of the original films on the substrate after the cross cut or 3M scotch tape test, in which 100% means the film is not broken while 0% means film is totally broken.



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## 性能测试对比

### Comparison test

项目 Item	材料 Material	国外UV墨水 Comparative Foreign Brands UV Ink	“优维”牌UV墨水 Huaguang Shencai UV Ink
附着 力实验 Adhesion Experiment	玻璃 Glass	 附着 力差 poor adhesion	 附着 力好 Fair Adhesion
	瓷 砖 Ceramic tile	 附着 力差 poor adhesion	 附着 力好 Fair Adhesion
耐 水 性 实 验 Water resistance Experiment	玻璃 Glass	 附着 力差 poor adhesion	 附着 力好 Fair Adhesion
	瓷 砖 Ceramic tile	 附着 力差 poor adhesion	 附着 力好 Fair Adhesion
	铝 塑 板 Aluminum composite panel	 附着 力差 poor adhesion	 附着 力好 Fair Adhesion

注：附着测试方法：用3M胶带粘在打印的样品上，然后撤掉胶带，以此测试墨水的附着力；用小刀或者尖锐的东西在打印材料上划痕，然后用3M胶带粘在打印的样品上，然后撤掉胶带，以此测试墨水的附着力。耐水性测试方法：将各种喷绘材料放在水里浸泡12小时后，按照附着测试方法测试耐水性。

Note: Adhesion Test Methods: 1. Stick the 3M scotch tape on the print samples and then tear the tape to test the adhesion of the ink; 2. Using a knife or sharp staff scratches on the print materials, stick the 3M scotch tape on the scratched print samples and then tear the tape to test the adhesion of the ink. Water resistance test method: Soak various printing material in water for 12 hours, then test the water resistance according to adhesion test method

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滴滴引领世界潮流  
Leading the Trend of the World with Every Drop



## 乐凯华光印刷科技有限公司

乐凯华光印刷科技有限公司（原乐凯集团第二胶片厂，以下简称乐凯华光科技）位于河南省南阳市，是中国最大的印刷感光材料科研、生产基地，也是国内唯一一家同时具有印刷胶片和印刷版材生产能力、全方位为印刷业服务的国有大型企业。乐凯华光科技于1977年建成投产，经过30多年的发展，企业已拥有总资产14亿元，职工3000余人，其中各类专业技术人员900余人，具有强大的研发力量和完善的质量保障体系，拥有一支包括博士、硕士在内200多人的专职研发队伍。“华光”牌印刷版材和印刷胶片已成为中国产销量最大、技术最先进、知名度最高的产品。目前，乐凯华光科技正牢记胡锦涛总书记的重托，精心打造“华光”品牌，又好又快发展乐凯华光科技，以崭新的面貌跨入一个更高层次、全新发展的平台！

## Lucky Huaguang Graphics Technology Co., Ltd

Lucky Huaguang Graphics Technology Co., Ltd (formerly the Second Film Factory of Lucky Group, hereinafter referred to as Lucky Huaguang Huaguang Technology) is located in Nanyang City, Henan Province, is China's largest printing photographic materials researching and producing base, and also the only company that has the capability to produce printing film and printing plate, also as a state-owned large enterprises, it has all-round services for the printing industry. Lucky Huaguang Huaguang Technology was put into operation in 1977, after 30 years' development, it has total assets of 1.4 billion, more than 3,000 employees, including more than 900 professional and technical staff. It has strong R & D strength and perfect quality assurance system, with a R & D team of more than 200 full-time staff, including doctors, and masters. "Hua Guang" brand of printing plate and printing film has become the largest and most technologically advanced and best-known products in China. Currently, with President Hu Jintao's great trust in mind, Lucky Huaguang Huaguang Technology is carefully creating "Hua Guang" brand, guarantee the sound and rapid development of Lucky Huaguang Technology, with a new look into a higher level, a brand-new platform for development.

## 北京神彩优维喷墨材料科技有限公司

北京神彩优维喷墨材料科技有限公司是集数码印刷用油墨及其原料的研发、生产、销售和服务于一体的专业油墨制造商。产品主要包括UV喷墨、水性喷墨和玻璃陶瓷表面清洁剂等。公司UV喷墨产品广泛适用于各种型号工业级喷头连续高速喷绘和喷印。在多项技术指标方面均达到或超过了国外同类名牌产品水平。特别是针对玻璃陶瓷等光滑基材，可免底漆直接喷绘，达到消除底漆色度影响、节能降耗和简化工序的目的。“优维”牌UV喷墨的开发成功，标志着我国不能生产高科技UV喷墨的历史宣告结束。

## Beijing Shencai Youwei Ink-jet Materials Technology Co., Ltd

Beijing Shencai Youwei Ink-jet Materials Technology Co., Ltd is a professional ink manufacturer with a set of digital printing inks and materials development, production, sales and service all in one. Its products include UV spray printing ink, water-based spray ink and glass ceramic surface freshener. Its UV spray printing ink products are widely applied to various types of industrial inkjet nozzles and continuous high-speed printing, which has reached or exceeded the level of similar foreign brands in a number of technical indicators, especially for glass, ceramics and other smooth substrate. Its primer-free direct printing eliminates the influence of substrate color, resultantly reducing the energy consumption and simplifying the processing. The successful development of Youwei UV jet ink puts an end to the history in which China cannot produce high-end UV jet ink with high-tech.