



# 上海宇昂水性新材料科技股份有限公司

Shanghai Yuking Water Soluble Material Tech Co.,Ltd.



## PRODUCT BROCHURE

## COMPANY PROFILE

Yuking Technologies is a high-tech enterprise featuring water-soluble polymers with global vision, core competitiveness and industry discourse right. The company was founded in 2005 with headquarters and R&D center located in Shanghai Zhangjiang International Medical Zone and its pilot & manufacturing bases respectively located in Shanghai Lingang New Area and High-tech district in Hubei Xiangyang.

The company's businesses are mainly focused on the R&D, Manufacturing and Sales in relation to Water Soluble Polymer Material technology, Environmental Protection technology, New Energy technology and final finished products. The products include novel pharmaceutical controlled release materials, water treatment film materials, new antifungal agents, surface modification materials, nano-coating materials and other cutting-edge water-soluble polymer materials. The products are closely involved in national key strategic industries such as biomedicine, new energy, food and beverages, water treatment, water-based coatings, nanomaterials and so on.

With its production base in Xiangyang up and running, the company's industrialization pattern has made significant breakthroughs. At present, our main products include both medium and high-end PVP polymer materials, high performance functional additives. With a total production capacity of 10,000 tons/year, nearly 100 product varieties are developed. The factory has passed the ISO 9001 quality management system, ISO 14001 environmental management system, KOSHER certifications and the US FDA registration (DMF), and has obtained the relevant Drug Manufacturing License.

Yuang Technology will adhere to the business philosophy of "meeting customer needs, pursuing excellent quality, building an excellent team, fulfilling social responsibility", stick to scientific and technological innovation, and continue to provide customers with quality products and services.

## ABOUT US

---

**Enterprise Vision:** To be the world's water-soluble polymer aircraft carrier.

**Enterprise Culture:** Passion, Freedom, Humility, Perseverance and Gratitude.

**Enterprise spirit:** Dignified in image, stand high in fighting spirit.

**Enterprise Operation Philosophy:** Meet customer's demand, Seek Excellent Quality, Forge a first-rate team and fulfil social accountabilities.

**Enterprise mission:** To be the navigator in Green & Environmental Protection and an escort for a healthy & happy life.

**Enterprise Value:** Create value for clients, opportunity for staff and profits for the society at large.

**Core competitiveness :**

- > More than 40 core technology invention patents
- > 6 international patents (the United States, Germany, the United Kingdom, Brazil, India);
- > Compilation of the academic monograph "Water Soluble Polymer"
- > Initiator for the formulation of 2 National Standards and 3 Group Standards.
- > More than 10 publications of SCI papers.
- > The core technologies and products have won the National Key New Products, the Excellent Prize of China Patent Award, and have been ranked as the First batch of New materials in Shanghai, the Innovative Products in Shanghai, the excellent Projects of production, education and research in Shanghai, and the Top 100 Transformation Projects of high-tech achievements in Shanghai, etc.

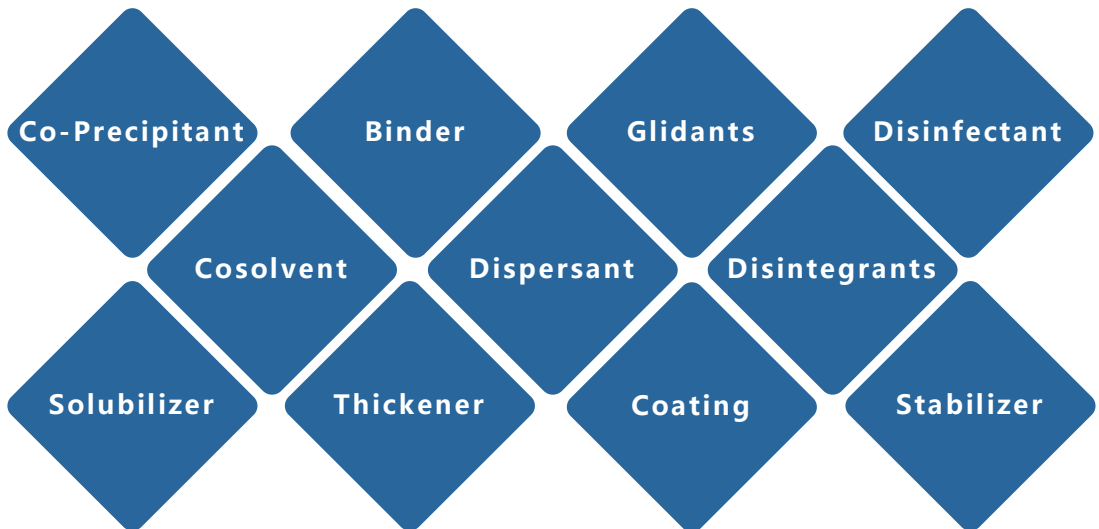
# PVP

---

**Polyvinyl Pyrrolidone (PVP in short) is a hydrophilic polymer material which is one of three major novel pharmaceutical excipients.**

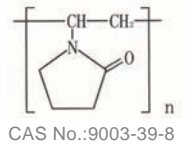
- Excellent physiological inertia without participating in human metabolism.;
- With excellent biocompatibility, it does not cause any irritation to skin, mucosa, eyes, etc;
- It functions to detoxify, stop bleeding, increase dissolution concentration, prevent peritoneal adhesion and promote blood sedimentation and so on.
- At present, PVP has been developed into a series of products such as homopolymer, copolymer, cross-linked polymer and complexes with molecular weight varies from thousands to over one million.

## Main functions in the pharmaceutical field



# Povidone

Povidone is a series of polymers formed by homopolymerization of N-vinylpyrrolidone, ranging from low molecular weight to high molecular weight. It has good hygroscopicity, film-forming ability, complexation and physiological compatibility. Widely used in various formulations as dispersants, solvents, adhesives, film forming agents, and stabilizers.



| Name         | K Value     | Viscosity Weight (wv) | Major role   |
|--------------|-------------|-----------------------|--|
| Povidone K15 | 12.75-17.25 | 8000-12000            | Used as a dispersant, cosolvent, crystallization inhibitor, etc. in liquid formulations.   |
| Povidone K17 | 15.3-18.36  | 10000-16000           |  |
| Povidone K25 | 22.5-27.0   | 30000-40000           | Used as a stabilizer for oral and topical suspensions, efficient adhesive for tablets, pore forming agent, thickener, etc.   |
| Povidone K30 | 27.0-32.4   | 45000-58000           |  |
| Povidone K90 | 81.0-97.2   | 1000000-1500000       | Used as a binder for tablets, granules, capsules, and other pharmaceuticals, as a stabilizer and solubilizer for oral suspensions, and as a dispersant, film-forming, and promoter for other formulations. |

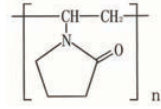
**Application:** tablets, granules, water injections, capsules, etc.

\* Conform to CP, EP, USP, BP, JP.

\* Other special models support customized production.

# Crospovidone

Crospovidone is a polymer with network molecular structure formed by highly cross-linked polymerization of N-vinylpyrrolidone. It has good hygroscopicity, strong water absorption and expansion ability, and does not form high viscosity gel. As a super disintegrating agent applied in the formulation of pharmaceutical formulations, it can promote the rapid release of active substances in drugs, thereby improving their bioavailability.



CAS No.: 25249-54-1/9003-39-8

## Pharmacy:

|                      |                 |                   |                 |
|----------------------|-----------------|-------------------|-----------------|
| <b>Product Name</b>  | Crospovidone XL | Crospovidone XL10 | Crospovidone SF |
| <b>Particle size</b> | 110-130um       | 20-40um           | 10-30um         |

\* Conform to CP, EP, USP, BP, JP.

## Food:

|                     |               |                  |                 |
|---------------------|---------------|------------------|-----------------|
| <b>Product Name</b> | PVPP-F        | PVPP-R           | **PVPP Granular |
| <b>Remarks</b>      | One Time Type | Regenerated Type | 5-15 Mesh       |

\* Conform to E1202. \*\*Customized.

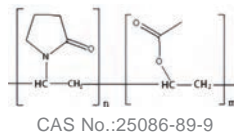


**Application:**highly efficient disintegrating agent,medicine slow-releasing carrier,adsorbent of tannin and polyphenols,moisture preserving agent.



# Copovidone

Copovidone is a copolymer of N-vinylpyrrolidone and vinyl acetate 6:4, which is easy to absorb moisture, has strong plasticity, and is not affected by changes in compression force. It can endow tablets with good hardness and is the best dry adhesive used in direct compression processes. It also serves as an adhesive for tablets, granules, and capsules, as well as a film-forming agent for tablet coating and bottom coating.



| Product Name | K Value   | (VP+VA) | Loss on drying | Heavy metals | Nitrogen | Aldehydes | Peroxide | Hydrazine |
|--------------|-----------|---------|----------------|--------------|----------|-----------|----------|-----------|
| VP/VA64      | 25.2-30.8 | ≤0.4%   | ≤5.0%          | ≤20ppm       | 7.0-8.0% | ≤500ppm   | ≤400ppm  | ≤1ppm     |

**Application:tablets, granules, capsules, etc.**

\* Conform to CP, EP, USP, BP, JP.

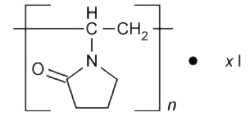


| VP/VA(Liquid): | VA37E | VA55I | VA64W | VA73E | VA73W |
|----------------|-------|-------|-------|-------|-------|
| VP/VA          | 30/70 | 50/50 | 60/40 | 70/30 | 70/30 |
| K Value        | 24-32 | 22-30 | 30-36 | 30-38 | 24-32 |
| Solid Assay %  | 50±2  | 50±2  | 50±2  | 50±2  | 50±2  |

**Application:personal care products, cosmetics, etc.**

# Povidone Iodine

Povidone Iodine is the complex of Iodine and Povidone. It has a powerful bactericidal activity against germs, viruses, fungi and molds. It is stable, non-irritating and completely soluble in water. We also have a self-developed high-stable PVPI which invented by our own R&D team.



CAS No.:25655-41-8



| Product Name | Available iodine/% | Residue on ignition/% | Loss on drying/% | Iodine ion/% | Arsenic/ppm | Heavy metal/ppm | Nitrogen/% |
|--------------|--------------------|-----------------------|------------------|--------------|-------------|-----------------|------------|
| PVP-I 10%    | 9.0-12.0           | ≤0.025                | ≤8.0             | ≤6.6         | ≤1.5        | ≤20             | 9.5-11.5   |
| **PVP-I 20%  | 19.0-22.0          | ≤0.1                  | ≤8.0             | ≤13.5        | -           | ≤20             | 7.5-10.5   |

## Application:

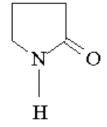
- Disinfection of skin and equipment prior to injection or surgery.
- Anti-inflammation in treatment such as dental and oral care, gynaecopathia.
- Disinfection of family tableware and apparatus.
- Sterilization and disinfection in the foodstuff industry
- Prevention of animal diseases.

\*Conform to CP, EP, USP, BP, JP.

\*\*Ordered products.

## $\alpha$ -Pyrrolidone(2-P)

An important chemical raw material and high polar organic solvent, widely used in industries such as pharmaceuticals, textiles, cosmetics, solvents, and electronic cleaning.



CAS No.:616-45-5

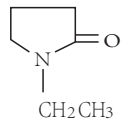


| Item    | Purity /wt% | Water /wt% | Chroma/Hazen | Refractive index/n <sub>D</sub> <sup>20</sup> |
|---------|-------------|------------|--------------|---|
| First   | ≥99.0       | ≤0.1       | ≤20          | 1.482-1.486                                   |
| Premium | ≥99.5       | ≤0.1       | ≤10          | 1.482-1.486                                   |

**Application:**pesticides, veterinary drugs, pharmaceutical solvents, intermediates, etc.

## N-vinylpyrrolidone(NVP)

An important chemical raw material and strong polar organic solvent, widely used in industries such as pharmaceuticals, textiles, cosmetics, solvents, and electronic cleaning.



CAS No.:88-12-0



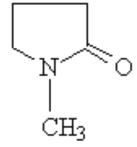
| Item       | Purity /wt% | Water /wt% | Chroma /Hazen | a-p/wt% | Impurity /wt% |
|------------|-------------|------------|---------------|---------|---------------|
| Industrial | ≥99.5       | ≤0.2       | ≤50           | ≤0.2    | ≤0.2          |
| Pharma     | ≥99.7       | ≤0.1       | ≤30           | ≤0.1    | ≤0.2          |

**Application:**medical synthetic monomer and solvents, etc.



# N-MethylPyrrolidone(NMP)

An organic solvent with strong polar that can dissolve with water and general organic solvents in any proportion. It has a series of excellent physical and chemical properties and is an efficient selective solvent with low toxicity, high boiling point, strong polarity, low viscosity, high solubility, low volatility, good stability, and easy recovery.



CAS No.:872-50-4



| Item                      | Industrial | Pharma | Electronic | Microelectronics level |
|---------------------------|------------|--------|------------|------------------------|
| Purity /wt%               | ≥99.5      | ≥99.8  | ≥99.9      | ≥99.95                 |
| Water/wt%                 | ≤0.05      | ≤0.03  | ≤0.02      | ≤0.01                  |
| Chroma/Hazen              | ≤25        | ≤20    | ≤10        | ≤10                    |
| pH value/(10% water, v/v) | --         | 7-10   | 6.5-9.0    | 6.5-9.0                |

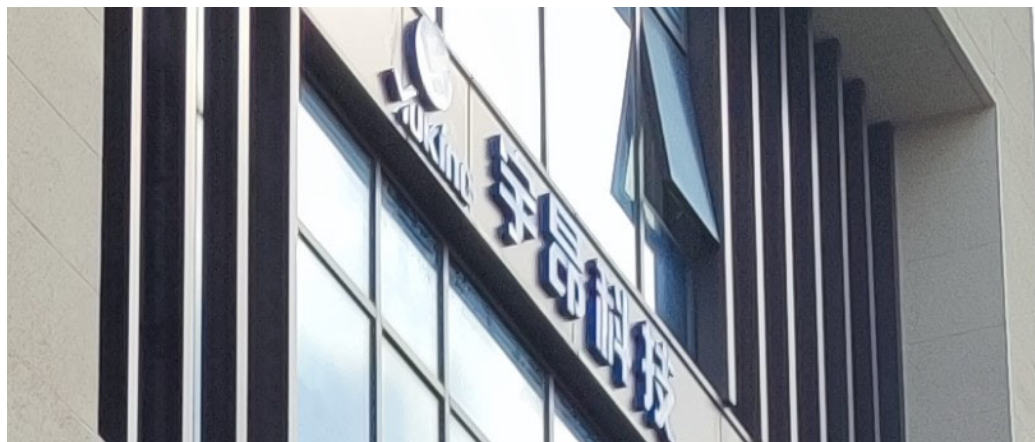
**Application:pesticides, veterinary drugs, pharmaceutical solvents, intermediates, etc.**

## Other products

| Product   | Package                      | Application  |
|---|------------------------------|--|
| N-Octylpyrrolidone (NOP)<br>CAS NO.: 2687-94-7                | 200kg/drum                   | Solvents in chemical reactions.Coating agent in electric industry.<br>Formulating agent in crop protection product.  |
| N-Ethylpyrrolidone(NEP)<br>CAS NO.: 2687-91-4                 | 200kg/drum                   | Diluent,solvent,cleaning agent.<br>Uses in the medicine and agricultural chemicals intermediate  |
| Hydroxypropyl Methyl Cellulose(HPMC)<br>CAS NO.: 9004-65-3    | 25kg kraft bag or fiber drum | Thickening, surface activity,Protective colloid.<br>Water retention, shape retention.  |
| Sodium Carboxy Methyl Cellulose(Na-CMC)<br>CAS NO.: 9004-32-4 | 25kg kraft bag or fiber drum | Bonding agent,medicinal preparation.<br>Thickening agent,Foam stabilizer.  |
| Super Absorbent Polymer(SAP)<br>CAS NO.:9003-04-7             | 25kg kraft bag               | For disposable sanitary products.For agriculture, forestry and gardening.<br>For cable drag strip/cable water ointment.For water inflation bag.For drying industry.  |
| Polyacrylamide(PAM)<br>CAS NO.:9003-05-6                      | 25kg kraft bag               | Anionic PAM: Oil displacement agent,water shutoff agent, paper-making auxiliary.<br>Cationic PAM: flocculant,clay anti-swelling agent,acidizing densifier.<br>Nonionic PAM:textile industry, sand control and stabilization. |

# Honor

---



|  |    |
|--|----|
| Shanghai patent pilot unit   | 01 |
| Shanghai academician workstation   | 02 |
| Undertaking enterprise of national key new product                               | 03 |
| Shanghai high and new technology company   | 04 |
| Shanghai cultivation enterprise of science and technology under Little Giant     | 05 |
| Pudong new district enterprise R&D organization of Shanghai                      | 06 |
| Shanghai Name trademark  | 07 |
| The enterprise with the highest potential in Shanghai                            | 08 |
| Shanghai high and new technology achievements transformation enterprise          | 09 |
| Shanghai specialized/fined/peculiar/new enterprise                               | 10 |
| Well-known brand of China's Petroleum and Chemical Industries                    | 11 |
| Top 15 of 1st China Innovation and Entrepreneurship                              | 12 |
| Secretariat of national polymer industry committee                               | 13 |
| Star enterprise of outstanding contribution prize/council member unit            | 14 |
| Leading unit for production study and research alliance of water soluble polymer | 15 |
| National standard setter of functional polymer                                   | 16 |
| Evaluating enterprise of Shanghai & National innovation fund                     | 17 |



**Stable production capacity**

- Multiple production lines with an annual capacity of over 3000MT.
- Easy access to stable supply of raw materials, with monthly operating rate at more than 80% .
- Customized packaging and service can be done according to customer requirements



**Delivery from two warehouses**

- The regular monthly inventory of Shanghai Lingang warehouse is 180 tons, which radiates to Jiangsu, Zhejiang, Shanghai and overseas regions.
- Hubei plant has a regular monthly inventory of 100 tons.
- ERP intelligent and efficient inventory management system.



**Sound aftersale service**

- Has a complete team ranging from R & D, quality, application technology, warehouse, logistics to other after-sales team, 24 hours service team.



Dear June 30, 2022  
KOSHER SUP. #1  
KOF # 15 10248326  
Certificate of Kosher Supervision  
Product Count: 7

**Kosher Certificate**

**YUKING TECHNOLOGIES CO., LTD**  
NO. 101 GUANYU ROAD, HIGH-TECH ZONE,  
XIANGYANG, HUBEI 441043 CHINA

The following products manufactured by YUKING TECHNOLOGIES CO., LTD are certified kosher with the listed symbols.

This certificate is valid through  
**06/30/2023**

| Product Name    | Status | Restrictions        | UNIQID     |
|-----------------|--------|---------------------|------------|
| CEPHALOSPORIN   | kosher | kosher not required | 0710000046 |
| CHLORAMPHENICOL | kosher | kosher not required | 0710000046 |
| NEOBI           | kosher | kosher not required | 0100007010 |
| POVIDONE        | kosher | kosher not required | 0100701076 |
| POVIDONE IODINE | kosher | kosher not required | 0100001037 |
| POVIDONE IODINE | kosher | kosher not required | 0100001037 |
| POLYMER         | kosher | kosher not required | 0100001037 |

To verify or for the most up to date certificate please go to [www.koshercertificate.com](http://www.koshercertificate.com)  
201 The Plaza, Teaneck, NJ 07666 | Phone 201 837 0500 | fax 201 837 2126

IK Kosher

Disclaimer: This certificate is the property of KOF-K Kosher Supervision and cannot be reproduced without the express permission of KOF-K Kosher Supervision. Page 1 of 1

**药品生产许可证**

企业名称: 宇昂科技有限公司  
社会信用代码: 91430000MA8928287X  
注册地址: 襄阳高新区关公路101号  
法定代表人: 杨欣  
企业负责人: 杨欣  
质量负责人: 周卫军  
生产地址和生产范围:  
湖北省襄阳市高新区关公路101号; 原料药(聚维酮碘) . \*\*\*

许可证编号: 鄂202204402  
分类码: 10h  
日常监督管理机构: 湖北省药品监督管理局  
投诉举报电话: 12315  
发证机关:

有效期至: 2027年9月27日

签发人: 王

2022年9月28日

官网网址: <http://www.china-drug.com/> 国家药品监督管理局



**Shanghai Yuking Water Soluble Material Tech Co., Ltd.**

**HQ:** 5F No.35 Lane 100, Banxia Road, Pudong, Shanghai 201203 China

**Factory:** Yuking Technologies Co., Ltd.

**Plant:** No. 101 Guanyu Road, High-Tech District, Xiangyang, Hubei  
441045 China

**Tel:** +86-21-68286299

**http://**[www.yukingchina.com](http://www.yukingchina.com)

**E-mail:** [yuking@unipolymer.com](mailto:yuking@unipolymer.com)