



HANGZHOU WEITONG NANO MATERIALS CO., LTD.



✉ sales@weitongchem.com | 🌐 <https://www.weitongchem.com/>
📍 Factory address: Building 2, Yongxing Science and Technology Park, Xiaoshan District, Hangzhou
📍 Company address: 203, Building 2, No. 90, Wensan Road, Xihu District, Hangzhou
📞 Whatsapp&电话: +86-15957113754



**HANGZHOU WEITONG NANO
MATERIALS CO., LTD.**
杭州维同纳米材料有限公司

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COMPANY PROFILE

公司简介



杭州维同纳米材料有限公司成立于2015年,是一家专注于N-乙烯基吡咯烷酮及下游PVP系列产品的研发、生产、销售企业。公司以“诚信、创新、奉献、合作”的企业精神,致力于为客户提供最优质的产品和服务。

我们的产品主要由原料N-乙烯基吡咯烷酮制成。除原材料外,我们还生产均聚物系列K15、K17、K25、K30、K60、K90、K115、K120,共聚物系列VA64粉末、V64E、VA64W、73W、73W、37E、37W,以及交联 PVPP XL-10、PVPP-10和聚维酮碘 pvpi 系列。

其中均聚物系列产品适用于医药、化妆品和食品领域,可用作稳定剂和分散剂。共聚物系列产品主要用于涂料、油墨和胶水的制造。交联产品用于去除酒精、啤酒等中的啤酒花残留物。聚维酮碘常用于皮肤消毒、治疗和疾病预防等医药领域。

除了产品本身的优良特性外,我们还非常注重产品的生产工艺。我们采用严格的生产管理流程,确保我们的产品质量符合国际标准。同时,我们也高度重视环保和安全,积极推进节能减排和事故防控。

因此,选择杭州维同纳米材料有限公司作为合作伙伴,您可以获得最可靠、安全、优质的产品,同时还能享受到我们完善的售前、售后服务。我们期待与您合作,推动各行各业的发展和进步。



ADVANTAGES TO CHOOSE US

选择我们的优势



COMPANY PROFILE



Hangzhou Weitong Nano Materials Co., Ltd. was established in 2015 and is a company specializing in the research and development, production, and sales of N-vinylpyrrolidone and downstream PVP series products. The company is committed to providing customers with the highest quality products and services with the corporate spirit of "integrity, innovation, dedication, and cooperation".

Our products are mainly made from the raw material N-vinylpyrrolidone. In addition to raw materials, we also produce homopolymer series K15, K17, K25, K30, K60, K90, K115, K120, copolymer series VA64 powder, V64E, VA64W, 73W, 73W, 37E, 37W, as well as cross-linked PVPP XL-10, PVPP-10, and povidone iodine PVPI series.

The homopolymer series products are suitable for the fields of medicine, cosmetics, and food, and can be used as stabilizers and dispersants. The copolymer series products are mainly used in the manufacturing of coatings, inks, and adhesives. Cross linked products are used to remove hops residues from alcohol, beer, and other substances. Povidone iodine is commonly used in pharmaceutical fields such as skin disinfection, treatment, and disease prevention.

In addition to the excellent characteristics of the product itself, we also attach great importance to the production process of the product. We adopt strict production management processes to ensure that our product quality meets international standards. At the same time, we also attach great importance to environmental protection and safety, actively promoting energy conservation, emission reduction, and accident prevention and control. Therefore, by choosing Hangzhou Weitong Nano Materials Co., Ltd. as a partner, you can obtain the most reliable, safe, and high-quality products, while also enjoying our comprehensive pre-sales and after-sales services. We look forward to working with you to promote the development and progress of various industries.



ADVANTAGES TO CHOOSE US

Free sample service

We can provide you with free samples if you want.

Direct factory, competitive price

We are the manufacturer, and we produce these products by ourselves, so there is no extra payment link in the middle. We can give you the most competitive price.

Quality control

We have the ISO9001 certificate, and we strictly follow GMP production standards for production.

Good after-sale service

We have a sound after-sales service system, so whatever you have any doubt about the product, you can strictly contact us, we will give you a satisfied plan.

What can you get from us?

You can get excellent products (strict quality control), factory direct sale (favorable and competitive price), great service (after-sales services, fast delivery) and professional business consultation.

1,4-丁二醇(BDO)

产品介绍

1,4-丁二醇(简称BDO)为无色油状可燃性液体,能与水混溶,溶于甲醇、乙醇、丙酮,微溶于乙醚。凝固点20.1℃;熔点20.2℃;沸点228℃,171℃(13.3kPa),120℃(1.33kPa),86℃(0.133kPa);相对密度1.0171(20/4℃);折射率1.4461;闪点121℃。

质量指标

项目	计量单位	优等品	一等品
外观		无色透明液体,无可见杂质	
1,4-丁二醇	%	≥99.7	≥99.5
水	%	≤0.02	≤0.02
色度	Hazen单位(铂-钴色号)	≤5	≤10

产品特点

1,4-丁二醇产品以天然气为原料,采用美国杜邦公司和英威达公司醛炔法工艺生产,技术先进,产品质量在国内居于领先地位。生产装置运行稳定可靠,核心设备连续运行最长时间116天,打破杜邦公司保持长达39年的112天记录。

产品用途

- 1,4-丁二醇是一种重要的基本化工及精细化工原料,用途广泛。
- 1,4丁二醇是生产四氢呋喃的主要原料,四氢呋喃是重要的有机溶剂,聚合后得到的聚四氢呋喃(PTMEG)是生产高弹性氨纶(如莱卡纤维)的主要原料。氨纶主要用于生产高级运动服、游泳衣等高弹性针织品。
 - 生产聚对苯二甲酸丁二醇酯(PBT)工程塑料和PBT纤维的基本原料;PBT塑料是最有发展前途的五大工程塑料之一,是迅速发展中的工程塑料。
 - 1,4-丁二醇作为增链剂和聚酯原料用于生产聚氨酯弹性体和软质聚氨酯泡沫塑料;
 - 1,4-丁二醇制得的酯类是纤维素、聚氯乙烯、聚丙烯酸酯类和聚酯类的良好增塑剂。
 - 1,4-丁二醇具有良好的吸湿性和增柔性,可作明胶软化剂和吸水剂,玻璃纸和其他用纸的处理剂。
 - 1,4-丁二醇的下游产品γ-丁内酯是生产2-吡咯烷酮和N-甲基吡咯烷酮产品的原料,由此而衍生出乙烯基吡咯烷酮、聚乙烯基吡咯烷酮等一系列高附加值产品。
 - 用于制备维生素B6、农药、除草剂以及作为多种工艺过程的溶剂、润滑剂、增湿剂、柔软性、胶粘剂和电镀工业的光亮剂。
 - 化学分析用试剂、用作气相色谱固定液。用作溶剂,无毒抗冻剂,食品乳化剂,吸湿剂,用于有机合成。制药、食品、化妆品工业。

产品包装

采用铝、镀锌铁桶包装,或以槽车按易燃有毒物品贮运。因凝固点20.1℃,槽车中应装有加热管。

储存条件

库房通风低温干燥,与氧化剂分开存放,搬运时轻装轻卸,保持包装完整。

1,4-Butanediol(BDO)

Product introduction

1,4-butanediol (referred to as BDO) is a colorless oily flammable liquid, which is miscible with water, soluble in methanol, ethanol, acetone, and slightly soluble in ether. Freezing point 20.1 °C, melting point 20.2 °C, boiling point 228 °C, 171 °C (13.3 kPa), 120 °C (1.33 kPa), 86 °C (0.133 kPa), relative density 1.0171 (20/4 °C), refractive index 1.4461, flash point 121 °C.

Quality index

Item	Measurement Unit	Superior Product	First Class
Appearance		Colorless, transparent liquid, no visible impurities	
1,4-butanediol	%	≥99.7	≥99.5
water	%	≤0.02	≤0.02
Chroma	Hazen unit (platinum-cobalt, color number)	≤5	≤10

Product features

Hangzhou Weitong 1,4-butanediol products are made of natural gas as raw materials, using the aldehyde alkyne process of DuPont and INVISTA, with advanced technology and leading product quality in China. The production unit operated stably and reliably, and the core equipment ran continuously for a maximum of 116 days, breaking the 39-year-old record of 112 days held by DuPont.

Use

- 1,4-butanediol is an important basic chemical and fine chemical raw material, which has a wide range of uses.
- 1,4 butanediol is the main raw material for the production of tetrahydrofuran, which is an important organic solvent, and the polytetrahydrofuran (PTMEG) obtained after polymerization is the main raw material for the production of highly elastic spandex (such as lycra fiber). Spandex is mainly used in the production of high-end sportswear, swimwear and other high-elastic knitwear.
 - The basic raw material for the production of polybutylene terephthalate (PBT) engineering plastics and PBT fibers, PBT plastics are one of the five most promising engineering plastics and are rapidly developing engineering plastics.
 - 1,4-butanediol is used as a chain enhancer and polyester raw material for the production of polyurethane elastomers and flexible polyurethane foams;
 - The esters prepared from 1,4-butanediol are good plasticizers for cellulose, polyvinyl chloride, polyacrylates and polyesters.
 - 1,4-butanediol has good hygroscopicity and flexibility, and can be used as gelatin softener and absorbent, cellophane and other paper treatment agents.
 - The downstream product of 1,4-butanediol γ-butyrolactone is the raw material for the production of 2-pyrrolidone and N-methylpyrrolidone products, which derives a series of high value-added products such as vinylpyrrolidone and polyvinylpyrrolidone.
 - It is used in the preparation of vitamin B6, pesticides, herbicides, and as solvents, lubricants, humidifiers, softness, adhesives and brighteners for the electroplating industry in a variety of processes.
 - Reagent for chemical analysis, used as gas chromatography stationary liquid. used as solvent, non-toxic antifreeze, food emulsifier, hygroscopic agent, for organic synthesis. Pharmaceutical, food, cosmetics industry.

Product packaging

Packed in aluminum, galvanized iron drums, or stored and transported by tanker as flammable and toxic substances. Due to the freezing point of 20.1℃, the tanker should be equipped with a heating tube.

Storage conditions

The warehouse is ventilated and dried at low temperature, stored separately from the oxidant, and is lightly loaded and unloaded during handling to keep the packaging intact.

聚四氢呋喃 (PTMEG)

产品介绍

聚四亚甲基醚二醇, 简称PTMEG, 是由单体四氢呋喃(THF)在催化剂的存在下, 经阳离子开环聚合得到的均聚物, 是一种伯羟端基的线性聚醚二醇, 常温下为白色蜡状固体, 当温度超过室温时熔化为透明、无色液体, 易溶解于醇、酯、酮、芳烃和氯化烃, 不溶于脂肪烃和水。PTMEG产品按相对分子质量分为250、650、1000、1400、1800、2000、3000等, 工业化生产可根据市场需要调整其相对分子质量, 从而生产出不同规格的产品。PTMEG主要用于生产聚氨酯弹性体、聚氨酯弹性纤维(氨纶)和酯醚共聚弹性体。

质量指标

产品规格	项目	单位	质量指标(企业标准)
PTMEG(T-1000)	平均摩尔质量	g/mol	目标值±30
	粘度(40°C时)	P	2.4~3.2
	分子量比率		1.92~2.07
	色度(铂-钴)	APHA	≤20
	碱度	meq/30Kg	-2.0~+0.50
	水分	mg/Kg	≤70
	稳定剂(BHT)	mg/Kg	150~350
	羰基比率		≤1.0
PTMEG(T-1800)	平均摩尔质量	g/mol	目标值±30
	粘度(40°C时)	P	8.50~10.50
	分子量比率		1.80~2.06
	色度(铂-钴)	APHA	≤20
	碱度	meq/30Kg	-2.0~+0.50
	水分	mg/Kg	≤70
	稳定剂(BHT)	mg/Kg	150~350
	羰基比率		≤1.0
PTMEG(T-2000)	平均摩尔质量	g/mol	目标值±30
	粘度(40°C时)	P	11.00~14.00
	分子量比率		1.80~2.06
	色度(铂-钴)	APHA	≤30
	碱度	meq/30Kg	-2.0~+0.50
	水分	mg/Kg	≤80
	稳定剂(BHT)	mg/Kg	150~350

产品特点

聚四氢呋喃以天然气为原料, 采用美国英威达公司非均相催化剂工艺生产, 产品质量在全球居于领先地位, 2013年1月通过了英威达PTMEG商业资格认证, 成为中国首家获得英威达PTMEG技术许可的生产商, 产品被佛山英威达、华峰氨纶等多家企业使用, 获得一致好评。公司可为客户提供优质的1000、1800、2000等多种分子量产品。

产品用途

- 主要用于生产聚氨酯弹性体、氨纶和酯醚共聚弹性体。
- 以PTMEG为原料生产的热塑性聚氨酯广泛用于石化、机械、军工、造船、汽车、合成革等行业。
- 广泛应用于生产涂料及表面活性剂等产品。

储存条件

散装可采用罐车、槽车和ISO贮罐, 全部保温并装配加热盘管。

贮存:

氮气条件下贮存; 不得与强的无机氧化剂(诸如硝酸)存放在一起; 防吸潮, 保持容器密闭; 最好在45°C (113° F) 以上的温度下贮存, 以防止固化。



Polytetrahydrofuran (PTMEG)

Product Introduction

Polytetramethylene ether glycol, referred to as PTMEG, is a homopolymer obtained by cationic ring-opening polymerization of the monomer tetrahydrofuran (THF) in the presence of a catalyst, which is a linear polyetherdiol with primary hydroxyl terminal group, which is a white waxy solid at room temperature, and melts into a transparent, colorless liquid when the temperature exceeds room temperature, which is easily soluble in alcohols, esters, ketones, aromatics and chlorinated hydrocarbons, and insoluble in ester fatty hydrocarbons and water. PTMEG products are divided into 250, 650, 1000, 1400, 1800, 2000, 3000, etc. according to the relative molecular weight, and the industrial production can adjust its relative molecular weight according to market needs, so as to produce products of different specifications.

Quality Index

Product specifications	Item	Unit	Quality index (enterprise standard)
PTMEG(T-1000)	average molar mass	g/mol	target value $\pm$ 30
	Viscosity (at 40 °C)	P	2.4~3.2
	Molecular weight ratio		1.92~2.07
	Chromaticity (platinum-cobalt)	APHA	$\leq$ 20
	alkalinity	meq/30Kg	-2.0~+0.50
	moisture	mg/Kg	$\leq$ 70
	Stabilizer (BHT)	mg/Kg	150~350
	carbonyl ratio		$\leq$ 1.0
PTMEG (T-1800)	average molar mass	g/mol	target value $\pm$ 30
	viscosity (at 40 °C)	P	8.50~10.50
	molecular weight ratio		1.80~2.06
	chromaticity (platinum-cobalt)	APHA	$\leq$ 20
	alkalinity	meq/30Kg	-2.0~+0.50
	moisture	mg/Kg	$\leq$ 70
	Stabilizer (BHT)	mg/Kg	150~350
	carbonyl ratio		$\leq$ 1.0
PTMEG (T-2000)	average molar mass	g/mol	target value $\pm$ 30
	Viscosity (at 40 °C)	P	11.00~14.00
	molecular weight ratio		1.80~2.06
	chromaticity (platinum-cobalt)	APHA	$\leq$ 30
	alkalinity	meq/30Kg	-2.0~+0.50
	moisture	mg/Kg	$\leq$ 80
	Stabilizer (BHT)	mg/Kg	150~350

Product features

Polytetrahydrofuran uses natural gas as raw material and is produced using the heterogeneous catalyst process of the American company Invista. The product quality is in a leading position in the world. In January 2013, it passed the INVISTA PTMEG commercial qualification certification and became the first company in China to obtain the INVISTA PTMEG technology license. And its products are used by many companies such as Foshan Invista and Huafeng Spandex, and have received unanimous praise. Our company can provide customers with high-quality 1000, 1800, 2000 and other molecular weight products.

Product use

- Mainly used for the production of polyurethane elastomer, spandex and ester ether copolymer elastomer.
- Thermoplastic polyurethane produced with PTMEG as raw material is widely used in petrochemical, machinery, military, shipbuilding, automobile, synthetic leather and other industries.
- It is widely used in the production of coatings and surfactants.

Storage and transportation conditions

Bulk can be filled by tankers, tankers and ISO tanks, all of which are insulated and equipped with heating coils.

Storage:

Nitrogen, not with strong inorganic oxidants (e.g. nitric acid), moisture-absorbent, keep container tightly closed, preferably at temperatures above 45°C (113°F) to prevent solidification.



N-甲基吡咯烷酮(NMP)

产品介绍

中文名称:N-甲基吡咯烷酮;英文名称:N-Methyl pyrrolidone;
中文别名:NMP;1-甲基-2吡咯烷酮;N-甲基-2-吡咯烷酮;CAS No :872-50-4;分子式:C5H9NO。
密度:1.028g/cm3;**熔点:**-24℃;**闪点:**91℃ ;**折光率**n20/D:1.47。
无色透明油状液体,微有胺的气味。能与水、醇、醚、酯、酮、卤代烃、芳烃和蓖麻油互溶。挥发度低,热稳定性、化学稳定性均佳,能随水蒸气挥发。有吸湿性。对光敏感。是一种极性的非质子传递溶剂,具有毒性小、沸点高、溶解力出众,选择性强和稳定性好的优点。

产品用途

- 广泛用于芳烃萃取,乙炔、烯烃、二烯烃的纯化,也用于聚合物的溶剂及聚合反应的介质,如工程塑料及芳纶纤维。另外还可用在农药、医药和清洁剂等方面。
- NMP在石化行业里的用途主要有以下几方面:
(1)抽提回收基础有机原料。可作为从天然气或轻质石脑油热裂解气中回收乙炔的溶剂,回收提浓乙炔的纯度达99.7%;作为从裂解C4烃中分离回收高纯度丁二烯的萃取剂,回收率达97%,回收丁二烯纯度为99.7%;用作裂解C5烃中回收高纯度异戊二烯的萃取剂,异戊二烯回收纯度达99%;用作芳烃萃取剂时由于它对芳烃具有高溶解度与低蒸汽压,工艺过程中萃取剂损耗率低、芳烃回收率高;
(2)润滑油精制。用作萃取润滑油中芳烃以达到精制润滑油的目的;
(3)用作聚合物及聚合反应的溶剂。比如生产聚苯硫醚和芳纶、聚酰亚胺、聚酰胺、聚胺酯等聚合物的聚合溶剂;
(4)作为树脂加工的溶剂可用于制造涂料、地板漆、清漆、复合涂料成膜、集成电路漆包线类绝缘材料、纤维织物类及胶粘剂等产品;
(5)工业用洗涤剂,清洗化工设备、堵塞物、附着物和涂装层等;
(6)应用于农药、颜料生产的溶剂和分散剂等。
- NMP在电子行业里的用途主要以下几方面:
(1)NMP用作聚偏二氟乙烯的溶剂等,以及锂离子电池的电极辅助材料;
(2)可用于光刻胶脱除液,LCD 液晶材料生产;
(3)应用于医药生产的溶剂;
(4)半导体行业精密仪器、线路板的洗净。

产品包装

本品化学性质不活泼,除铜外,对其他金属如碳钢、铝等无腐蚀性。采用镀锌铁桶包装,按一般化学品规定贮运,净重200kg/桶。散装用ISOTANK罐。

储存条件

贮存于阴凉、通风库房内,防潮、远离火种、热源,与氧化剂分开。搬运时轻装轻卸,保持包装完整,防止泄漏。

质量指标

工业级

检验项目	标准要求及标明值要求	
	优等品	一等品
外观	无色或微黄色透明液体	
纯度W %, ≥	99.90	99.50
水份含量(%), ≤	0.03	0.05
色度Hazen单位(铂-钴色号), ≤	20	30
γ-丁内酯, W %≤	0.05	0.10
折光率 n _d ²⁰	1.4680~1.4720	
总胺 W %≤	0.01	/
PH值(1ml/10ml) 水溶液	7—10	/

电子级

序号	检验项目	质量指标
1	纯度(%), ≥	99.9
2	水份(%), ≤	0.02
3	色度(Pa-Co)号, ≤	15
4	GBL(%), ≤	0.03
5	总胺(mg/kg) ≤	20
6	CL-, (mg/kg) ≤	0.5
7	SO42- (mg/kg) ≤	0.5
8	NO3- (mg/kg) ≤	0.5
9	钠(μg/kg) ≤	10
10	钾(μg/kg) ≤	10
11	铁(μg/kg) ≤	10
12	铜(μg/kg) ≤	10
13	镁(μg/kg) ≤	10
14	锌(μg/kg) ≤	10
15	铝(μg/kg) ≤	10
16	钙(μg/kg) ≤	10
17	铬(μg/kg) ≤	10
18	锰(μg/kg) ≤	10
19	镍(μg/kg) ≤	10
20	铅(μg/kg) ≤	10

N-乙基吡咯烷酮

产品介绍

中文名称: N-乙基吡咯烷酮; 中文别名: N-乙基-2-吡咯烷酮、1-乙基-2-吡咯烷酮;
英文别名: 1-Vinyl-2-pyrrolidinone、Vinylpyrrolidone optical grade、N-Vinylbutyrolactam、N-Vinyl-2-pyrrolidone、Vinylpyrrolidone、NVP、N-vinylpyrrolidone; 分子式: C₆H₉NO; 分子量: 111.14。
熔点 13-14 °C, 沸点 92-95 °C (11 mmHg), 密度 1.043 g/cm³ (25 °C), 蒸气密度 3.8 (vs air), 蒸气压 0.1 mmHg (24 °C), 折光系数 n_D²⁰ 1.512, 闪点 93.9 °C。

质量指标

项目	单位	技术指标
外观 (25 °C)	/	无色或微黄色澄净液体
N-乙基吡咯烷酮, W %	%	≥ 99.7
活性	/	≥ 3.5
色度	Hazen 单位 (铂钴色号)	≤ 30
水分, W %	%	≤ 0.07
α-吡咯烷酮, W %	%	≤ 0.20
聚合物	mg/kg	≤ 15

产品用途

N-乙基吡咯烷酮 (NVP) 为无色或微黄色澄净液体。其均聚物和共聚物具有高极性、水溶性、化学稳定性、低毒性、阳离子活性等固有特性, 因而广泛应用于制药、化妆品、涂料、墨水、粘结剂等行业, 并用于聚维酮的制备。

产品包装

根据客户要求, 一般采用镀锌铁桶 (净重 200 kg/桶); 散装采用 ISO TANK 运输。

储存条件

在不使用时, 保持容器严密的封闭。储存在冷却、干燥、阳光不能直接照射的位置。

NVP

Product Introduction

Name: 1-Vinyl-2-pyrrolidinone、Vinylpyrrolidone optical grade、N-Vinylbutyrolactam、N-Vinyl-2-pyrrolidone、Vinylpyrrolidone、NVP、N-vinylpyrrolidone.
Molecular Formula: C₆H₉NO, Molecular Weight: 111.14.
The melting point is 13-14 °C, the boiling point is 92-95 °C (11 mmHg), the density is 1.043 g/cm³ (25 °C), the vapor density is 3.8 (vs air), the vapor pressure is 0.1 mmHg (24 °C), and the refractive coefficient is n_D²⁰ 1.512, flash point 93.9 °C.

Quality index

Items	Units	Technical indicators
Appearance (25 °C)	/	Colorless or slightly yellow clear liquid
N-vinylpyrrolidone, W %	%	≥ 99.7
Activity	/	≥ 3.5
Chroma	Hazen Units (Platinum Cobalt)	≤ 30
Moisture , W %	%	≤ 0.07
α-Pyrrolidone, W %	%	≤ 0.20
Polymer	mg/kg	≤ 15

Use

N-vinylpyrrolidone (NVP) is a colorless or yellowish clear liquid. Its homopolymers and copolymers have inherent characteristics such as high polarity, water solubility, chemical stability, low toxicity, cationic activity, etc., so they are widely used in pharmaceutical, cosmetic, coatings, inks, binders and other industries, and are used in the preparation of povidone.

Packing

According to customer requirements, galvanized iron drum (net weight 200 kg/drum) is generally used, and bulk is transported by ISO TANK.

Storage conditions

Keep the container tightly closed when not in use. Store in a cool, dry location where direct sunlight is not available.

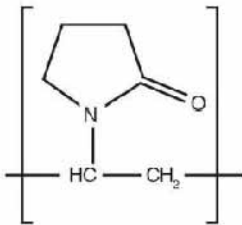
聚乙烯吡咯烷酮K 系列

药典名称:聚维酮

化学名称:聚乙烯吡咯烷酮

INCI/CTFA 名称:PVP (Polyvinylpyrrolidone)

CAS 登记号:9003-39-8



性状

粉末或水溶液,易溶于水、醇、胺及卤代烃中,不溶于丙酮、乙醚等。具有优良的溶解性、生物相容性、生理惰性、成膜性、膜体保护能力和多种有机、无机化合物复合的能力,对酸、盐及热较稳定,因此有着广泛的用途。

质量指标

品名		PVP K12	PVP K15	PVP K17	PVP K25	PVP K30	PVP K60	PVP K90
外观		白色至乳白色粉末						
K 值		10.2-13.8	12.75-17.25	15.3-18.36	22.5-27.0	27-32.4	54-64.8	81-97.2
NVP 残单 (杂质)	(CP2005/USP26)%max	0.1	0.1	0.1	0.1	0.1	0.1	0.1
	(USP31/EP6/BP2007) ppm max	10	10	10	10	10	10	10
水分%max		5.0	5.0	5.0	5.0	5.0	5.0	5.0
固含量%min		95	95	95	95	95	95	95
pH值(5%水溶液)		3.0-5.0	3.0-5.0	3.0-5.0	3.0-5.0	3.0-5.0	4.0-7.0	4.0-7.0
硫酸盐灰分%max		0.1	0.1	0.1	0.1	0.1	0.1	0.1
氮含量%		11.5-12.8	11.5-12.8	11.5-12.8	11.5-12.8	11.5-12.8	11.5-12.8	11.5-12.8
2-吡咯烷酮(杂质B)%max		3.0	3.0	3.0	3.0	3.0	3.0	3.0
醛(以乙醛计)ppm max		500	500	500	500	500	500	500
重金属(以铅计)ppm max		10	10	10	10	10	10	10
砷ppm max		1	1	1	1	1	1	1
过氧化物(以过氧化氢计) ppm max		400	400	400	400	400	400	400

应用

- 医药领域:聚维酮为国际倡导的三大药用新辅料之一。应用最广的是片剂、颗粒剂的粘合剂。它还可用作胶囊的助流剂,眼药的去毒剂及润滑剂,注射剂的助溶剂,液体制剂的分散剂,酶及热敏药物的稳定剂。聚维酮还可与碘合成聚维酮碘(PVP-I)消毒杀菌剂。在隐形眼镜中,PVP 作为接触眼镜的成份,可增加其亲水性。PVP 在医药上还可用作低温保存剂。
- 工业领域:聚维酮在颜料、印刷墨水、纺织、印染、彩色显象管中可用作表面包覆剂、分散剂、增稠剂、粘合剂。PVP可改进粘结剂对金属的、玻璃、塑料等材料的粘结性能。另外,PVP在分离膜、医用高分子材料、光固树脂、光固涂料、光导纤维、激光视盘等新兴高科技领域的应用也日益广泛。

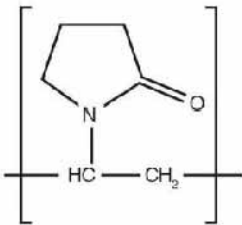
POLYVINYLPIRROLIDONE (PVP-K)

Pharmacopoeia Name: PVP-K

PovidoneChemical Name: Polyvinylpyrrolidone

INCI/CTFA Name: PVP (Polyvinylpyrrolidone)

CAS Number: 9003-39-8



Properties

powder or aqueous solution, soluble in water, alcohol, amine and halogenated hydrocarbons, insoluble in acetone, ether, etc. It has excellent solubility, biosolubility, physiological inertness, film-forming, membrane body protection ability and the ability to compound a variety of organic and inorganic compounds, and is relatively stable to acids, salts and heat, so it has a wide range of uses.

Quality index

Product Name		PVP K12	PVP K15	PVP K17	PVP K25	PVP K30	PVP K60	PVP K90
Appearance		White to Milky White Powder						
K Value		10.2-13.8	12.75-17.25	15.3-18.36	22.5-27.0	27-32.4	54-64.8	81-97.2
NVP Residue	(CP2005/USP26)%max	0.1	0.1	0.1	0.1	0.1	0.1	0.1
	(USP31/EP6/BP2007) ppm max	10	10	10	10	10	10	10
Moisture		5.0	5.0	5.0	5.0	5.0	5.0	5.0
Solid Content		95	95	95	95	95	95	95
pH Value		3.0-5.0	3.0-5.0	3.0-5.0	3.0-5.0	3.0-5.0	4.0-7.0	4.0-7.0
Sulfate Ash %max		0.1	0.1	0.1	0.1	0.1	0.1	0.1
Nitrogen Content%		11.5-12.8	11.5-12.8	11.5-12.8	11.5-12.8	11.5-12.8	11.5-12.8	11.5-12.8
2-Pyrrolidone (Impurity B) %max		3.0	3.0	3.0	3.0	3.0	3.0	3.0
Aldehyde (Acetaldehyde) ppm max		500	500	500	500	500	500	500
Heavy Metals (Lead) ppm max		10	10	10	10	10	10	10
Album pDm maX		1	1	1	1	1	1	1
Peroxide (Hydrogen Peroxide) ppm max		400	400	400	400	400	400	400

Application

- Pharmaceutical field: Povidone is one of the three major new pharmaceutical excipients advocated by the world. The most widely used are adhesives for tablets and granules. It can also be used as a grafting agent for capsules, a detoxifier and lubricant for eye medicine, a co-solvent for injections, a dispersant for liquid preparations, and a stabilizer for enzymes and heat-sensitive drugs. Povidone can also be combined with iodine to synthesize povidone-iodine (PVP-I) disinfectant and fungicide. In contact lenses, PVP is used as an ingredient in contact lenses to increase their hydrophilicity. PVP can also be used as a cryopreservation agent in medicine.
- Industrial field: povidone can be used as a surface coating agent, dispersant, thickener and adhesive in pigments, printing inks, textiles, printing and dyeing, and color development tubes. PVP can improve the adhesion of binders to metal, glass, plastics and other materials. In addition, PVP is increasingly widely used in emerging high-tech fields such as separation membranes, medical polymer materials, light-setting resins, light-setting coatings, optical fibers, and laser optic discs.

PVP 应用场景

PVP Application



医药领域:

增溶剂, 胶囊外壳, 成膜剂, 赋形剂, 崩解剂, 杀菌消毒剂, 缓释剂, 分散稳定剂, 黏结剂, 包衣剂, 助溶剂。

Pharmaceutical field:

used as solubilizers, capsule shells, film formers, excipients, disintegrants, bactericidal disinfectants, sustained-release agents, dispersion stabilizers, binders, coating agents, co-solvents. Used as a binding agent in tablets, capsules, and other drug formulations.

新能源、动力电池领域:

CNTS负极材料分散剂, 正极银浆用球形银粉分散剂。

New energy, power battery field:

CNTS anode material dispersant, cathode silver paste spherical silver powder dispersant.



工业领域:

- 1、新型特种涂层: 保护导电材料外绝缘层, 避免经过反复的骤热、骤冷、日晒雨淋, 会老化或破裂, 或者因为渗水而漏电。
- 2、石油、天然气开采: 助流剂、抑制剂 (管道内减少结晶, 阻塞)。
- 3、环保水处理膜 (制孔剂)。

Industries:

1. New special coating: protect the outer insulation layer of conductive materials to avoid aging or rupture after repeated sudden heat, sudden cold, sun and rain, or leakage due to water seepage;
2. Oil and gas exploitation: flux aids, inhibitors (reduce crystallization and blockage in pipelines);
3. Environmental protection water treatment membrane (pore making agent).



化妆品领域:

增稠剂、稳定性、分散剂及洗涤用品表面活性剂。

personal care industry:

used as a thickening agent and emulsifier in products such as shampoo, lotions, and moisturizers.

食品领域:

用作食品乳化剂和稳定剂, 用于生产饮料、烘焙食品和冷冻甜点。它有助于改善食品的质地、稠度和整体质量。

food :

used as food emulsifier and stabilizer, used in the production of beverages, baked goods, and frozen desserts. It helps to improve the texture, consistency and overall quality of the food products.



纺织行业:

用作合成纤维的涂层材料, 有助于提高其强度、耐久性和耐磨性。

textiles:

used as a coating material for synthetic fibers, which helps to improve their strength, durability and resistance to abrasion.

涂料、油墨印染领域:

优良的溶解性、成膜性、生理惰性、络合能力。

coatings:

used as a binding agent for coatings and paints, providing excellent adhesion, durability and water resistance. It is also widely used as a thickener and stabilizer in various formulations, including inks, adhesives, and sealants.



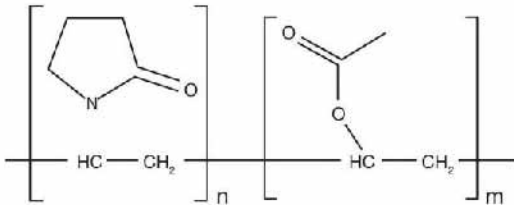
共聚维酮

药典名称:共聚维酮

化学名称:乙烯吡咯烷酮与醋酸乙烯共聚物

INCI/CTFA 名称:VP/VA 共聚物

CAS 号:25086-89-9



性状

共聚维酮是一种水溶性高分子树脂,为白色粉末,无臭无味,易吸潮,可溶于水、乙醇及无水醇类,具有良好的粘结性、吸湿性、成膜性和表面活性。

质量指标

外观	白色至乳白色粉末
醛(以乙醛计)ppm max	500
过氧化物ppm max	400
胂ppm max	1
残单(NVP,VA)%max	0.1
2-吡咯烷酮%max	0.5
重金属(以铅计)ppm max	20
水份%max	5
灰份%max	0.1
K值	25.2-30.8
醋酸乙烯含量%	35.3-42
氮含量%	7.0-8.0

应用

- **医药领域:**主要作为水溶性粘合剂和干性粘合剂应用于制粒合直接压片技术,作为成膜材料用于薄膜包衣中,作为孔道形成物应用于遮味剂中。应用于糖衣防止裂片,底层包衣用于防潮。
- **工业领域:**VP/VA共聚物在工业上被用作再湿型粘结剂,纸张用胶粘剂,涂料的粘合剂,各种油墨的增稠剂及保护性胶体,植保剂常用的乳化剂及保护性胶体。

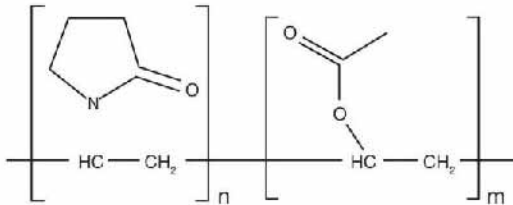
PVP VA64

Chemical Name: polyvinylpyrrolidone va64, Vinyl Pyrrolidone and Vinyl Acetate Copolymer

USP/EP Name: Copovidone, copovidonum

INCI: VP/VA copolymer

CAS NO.: 25086-89-9



Appearance Properties

Copovidone is a water-soluble polymer resin, white powder, odorless and tasteless, easy to absorb moisture, soluble in water, ethanol and anhydrous alcohols, with good adhesion, hygroscopicity, film-forming and surface activity.

product specifications

Appearance	White to milky powder
Aldehydes (as acetaldehyde)ppm max	500
peroxideppm max	400
hydrazineppm max	1
Remnants(NVP,VA)%max	0.1
2-Pyrrolidone%max	0.5
Heavy Metals (as Lead)ppm max	20
Water%max	5
Ash%max	0.1
K value	25.2-30.8
Vinyl acetate content%	35.3-42
Nitrogen content%	7.0-8.0

Main properties

- **Pharmaceutical field:** mainly used as water-soluble adhesive and dry adhesive in granulation and direct tableting technology, as a film-forming material in film coating, and as a pore forming agent in odor masking. It is applied to sugar coating to prevent splintering, and the base coating is used to prevent moisture.
- **Industrial:** VP/VA copolymers are used in industry as rewettable adhesives, paper adhesives, coating binders, thickeners and protective colloids for various inks, emulsifiers and protective colloids commonly used in plant protection agents.

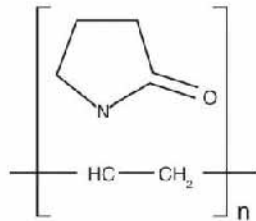
交联聚维酮

药典名称:交联聚维酮

化学名称:交联聚乙烯吡咯烷酮, PVPP

INCI/CTFA 名称:Insoluble PVP

CAS 号:25249-54-1,9003-39-8



性状

白色或乳白色自由流动粉末,易吸湿无臭或微臭,不溶于水、碱、酸及常用有机溶剂,具有很强的膨胀性能和与多类物质的络合能力。

质量指标

外观	PolyKoVidoneTM-XL(Type A)	PolyKoVidoneTM-10(Type B)
颜色	白色或浅黄色粉末	
水可溶物%max	1.0	1.0
pH值(1%水溶液)	5.0-8.0	5.0-8.0
干燥失重%max	5.0	5.0
硫酸盐灰分%max	0.1	0.1
氮含量%	11.0-12.8	11.0-12.8
杂质A(残单)ppm max	10	10
过氧化物(以过氧化氢计)ppm m	400	1000
重金属ppm max	10	10
粒度(μm),≥80%	50-250	5-50

应用

- **医药应用:** 由于交联聚维酮的高分子量和交联结构,不溶于水但遇水能迅促使其网络结构膨胀并产生崩解作用,医药上广泛用作片剂的崩解剂,另外被广泛用作悬浮稳定剂,药物成分络合剂,植物性药物中单宁及多酚物质的络合剂。
- **食品应用:** PolyFilterTM分子具有酰胺键及吸附多酚分子上的氢氧基从而形成氢键,因此,可用作啤酒,果酒/葡萄酒,饮料酒的稳定剂,延长其货架寿命,并改善其透明度、色泽和味道。该产品有一次性和再生性两种规格,一次性产品适合中小企业使用;再生性产品需购置专用过滤设备,但可回收利用,适合大型啤酒厂循环使用。

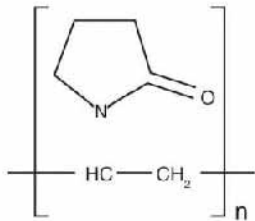
PVP-P

Pharmacopoeia Name: Crospovidone

Chemical Name: Crospovinylypyrrolidone, PVPP

INCI/CTFA Name: Insoluble PVP

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



Properties

white or milky white free-flowing powder, easy to absorb moisture, odorless or slightly odorous, insoluble in water, alkali, acid and commonly used organic solvents, with strong swelling performance and complexation ability with many types of substances.

Quality index

Appearance	PolyKoVidoneTM-XL(Type A)	PolyKoVidoneTM-10(Type B)
color	white or light yellow powder	
Water soluble matter %max,	1.0	1.0
pH value (1% aqueous solution)	5.0-8.0	5.0-8.0
loss on drying %max,	5.0	5.0
sulfate ash %max,	0.1	0.1
nitrogen content%,	11.0-12.8	11.0-12.8
impurity A (residual monolith) ppm max	10	10
peroxide (hydrogen peroxide) ppm m	400	1000
heavy metal ppm max	10	10
particle size (μm), ≥80%,	50-250	5-50

Application

- **Pharmaceutical application:** due to the high molecular weight and cross-linked structure of cross-linked povidone, insoluble in water but can quickly promote its network structure to expand and disintegrate when exposed to water, it is widely used as a disintegrant for tablets in medicine, and is also widely used as a suspension stabilizer, a complexing agent for pharmaceutical ingredients, and a complexing agent for tannins and polyphenols in plant drugs.
- **Food applications:** PolyFilterTM molecules have amide bonds and adsorption of hydroxide groups on polyphenol molecules to form hydrogen bonds, so they can be used as stabilizers for beer, fruit wine/wine, and beverage wines, extending their shelf life, and improving their clarity, color, and taste. The product is available in both disposable and regenerative specifications, and the disposable product is suitable for small and medium-sized enterprises; Recycled products require the purchase of special filtration equipment, but they can be recycled and suitable for recycling in large breweries.

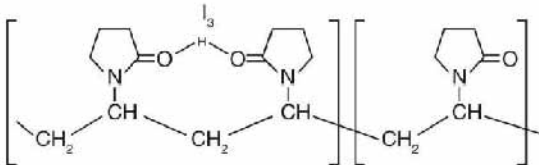
聚维酮碘

药典名称:PVP-I

化学名称:聚乙烯基吡咯烷酮与碘的络合物

INCI/CTFA 名称:PVP-Iodine

CAS 号:25655-41-8



性状

PVP-I 是 PVP与碘的络合物,对细菌、病毒、真菌、霉菌、孢子都有较强的杀灭作用,稳定、无刺激、完全水溶。

质量指标

聚维酮碘	CP2005/USP26	USP31	EP6.0
外观	棕红色或黄棕色无定形粉末		
有效碘%	9.0-12.0	9.0-12.0	9.0-12.0
碘离子%max	6.6	6.6	6.0
重金属ppm max	20	10	—
硫酸盐灰分%max.	0.1	0.025	0.1
氮含量%	9.5-11.5	9.5-11.5	—
pH值(10%水溶液)	—	—	1.5-5.0
干燥失重%max.	8.0	8.0	8.0

应用

主要用于医院手术、注射等皮肤消毒和器材消毒,以及口腔、妇科、外科、皮肤科等预防感染;家庭食具、器具等杀菌消毒;食品工业、养殖业用于杀菌消毒及动物疾病防治等,是国际国内首选的含碘医用杀菌剂及卫生防疫消毒剂。

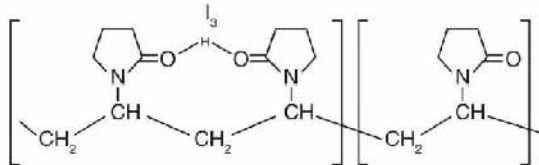
PVP-I

Pharmacopoeia Name: Povidone-iodine

Chemical Name: Polyvinylpyrrolidone complexes with iodine

INCI/CTFA Name: PVP-Iodine

CAS Number: 25655-41-8



Properties

PVP-I is a complex of PVP and iodine, which has a strong killing effect on bacteria, viruses, fungi, molds and spores, and is stable, non-irritating and completely water-soluble.

Quality index

Povidone-iodine	CP2005/USP26	USP31	EP6.0
Appearance	Brown-red or yellow-brown amorphous powder		
available iodine %	9.0-12.0	9.0-12.0	9.0-12.0
max iodine ions %	6.6	6.6	6.0
heavy metal ppm max	20	10	—
sulfate ash %max,	0.1	0.025	0.1
nitrogen content	9.5-11.5	9.5-11.5	—
pH value (10% aqueous solution),	—	—	1.5-5.0
weight loss on drying %max	8.0	8.0	8.0

Application

Mainly used for skin disinfection and equipment disinfection such as hospital surgery and injection, as well as oral cavity, gynecology, surgery, dermatology and other infection prevention, household utensils, utensils and other sterilization and disinfection, food industry, aquaculture industry for sterilization and disinfection and animal disease prevention, etc., is the first choice of iodine-containing medical fungicides and health and epidemic prevention disinfectants at home and abroad.

PVP-O 阳离子共聚物

药典名称:PQ-11 (聚季铵盐-11)
化学名称:乙烯基吡咯烷酮及甲基丙烯酸二甲氨乙酯季铵盐共聚物
CTFA 名称:Polyquaternium-11
CAS 登记号:053633-54-8

性状

无色至浅黄色、高粘度、透明液体，易溶于水。可形成透明、无粘性、柔韧的连续薄膜。具有阳离子特性，对头发有亲和性，提供调理及坚挺的效果，积聚极少，令头发更易梳理、有光泽、平整、易做发型。可与阴离子、非离子及两性表面活性剂配伍。对眼和肌肤无刺激性。

质量指标

牌号	PVPQ755N	PVPQ440
固含量(%)	20±1	30±1
残单(%)	<0.2	<0.2
PH值(10%水溶液)	5-8	5-8
粘度(mPa·S)	(1.5-5.0)×10 ⁴	(0.3-1.5)×10 ⁴
溶液体系	水溶液	乙醇溶液

应用

- 在长效卷发液、调理用香波、清洗调理品中作为调理剂；
- 在定发型产品中作为成膜剂(喷雾剂、香露、凝胶及摩丝)；
- 供头发调理及干发用的喷雾品；
- 在洗手香露及剃须露、润肤露、祛臭剂防汗剂产品中作为增加舒适感的添加剂。

Polyquaternium-11

Pharmacopoeia Name: PQ-11 (Polyquaternium-11)
Chemical Name: Vinylpyrrolidone and Dimethylaminoethyl Methacrylate Quaternary Amine Copolymer
CTFA Name: Polyquaternium-11
CAS Registry Number: 053633-54-8

Properties

colorless to light yellow, high viscosity, transparent liquid, soluble in water. It can form a transparent, non-sticky, flexible continuous film. With cationic properties, it has an affinity for hair, provides conditioning and firming effects, and has minimal accumulation, making hair easier to comb, shiny, smooth and easy to style. It can be compatible with anionic, nonionic and amphoteric surfactants. It is non-irritating to the eyes and skin.

Quality index

Number	PVPQ755N	PVPQ440
solid content (%)	20±1	30±1
residual single (%),)	<0.2	<0.2
PH value(10% aqueous solution)	5-8	5-8
viscosity (mPa·S)	(1.5-5.0)×10 ⁴	(0.3-1.5)×10 ⁴
solution system	aqueous solution	ethanol solution

Applications

- As a conditioning agent in long-lasting curly hair liquids, conditioning shampoos, and washing and conditioning products.
- As a film-forming agent (spray, perfume, gel and mousse) in hair styling products.
- Sprays for hair conditioning and drying as an additive to increase comfort in hand soap and shaving lotions, body lotions, odor reticulants and antiperspirant products.

α-吡咯烷酮

产品名称: α-吡咯烷酮 (2-P)
 化学名称: 2-吡咯烷酮
 CTFA名称: 2-Pyrrolidone
 CAS No.: 616-45-5
 分子式: C₄H₇NO

物理性质

无色液体。熔点24.6℃, 沸点245℃, 折光率1.4870。能与水、醇、醚、氯仿、苯、乙酸乙酯和二硫化碳混溶, 难溶于石油醚。密度1.12g/mL at 25 °C (lit.) 蒸气密度2.9 (vs air) 储存条件2-8 °C。

应用

- 2-吡咯烷酮为高沸点极性溶液, 用作溶剂和有机合成中间体。
- 用来制造尼龙-4以及乙烯基吡咯烷酮等。
- 主要用于合成树脂、农药、多元醇、油墨和碘的溶剂, 也是生产聚乙烯吡咯烷酮、锦纶-4和脑复康的原料和PVPK15/K17配合使用生产兽药。



2-Pyrrolidone

Product name : α-P α-Pyrrolidone
 Chemical Name: 2-Pyrrolidone
 CTFA name: 2-Pyrrolidone
 CSC No.: 616-45-5
 Molecular formula: C₄H₇NO

Product Description

2-Pyrrolidone is also known as pyrrolidone, azolone, butyrolactam. It is an organic compound with a molecular formula of C₄H₇NO. Colorless crystals, can be used as solvents and organic synthesis intermediates, used to make nylon-4 and vinyl pyrrolidone, etc.

Physical properties

It is a colorless crystal below 23°C, and exists as a clear and transparent liquid above 24.6°C, with good chemical stability and non-corrosiveness. Miscible with lower ketones, alcohols and chloroform.

Specification

item	Premium product	First grade
2-P content % (wt)	≥99.70	≥99.50
Water content % (wt)	≤0.10	≤0.30
Refractive index (n _D)	14830-14850	14830-14850
Density 20°C (g/mL)	1097-1117	1097-1117
γ-butyrolactone content%	≤0.05	≤0.10
appearance	Colorless transparent liquid	Colorless or light yellow transparent liquid

Application

2-Pyrrolidone has a variety of applications in different industries. It is commonly used as a solvent for many polar and nonpolar compounds, as well as a chemical intermediate in the production of other chemicals such as pesticides, pharmaceuticals, and polymers. When used in the pharmaceutical industry, 2-Pyrrolidone is used as a solubilizer and stabilizer for various active pharmaceutical ingredients. It also finds application as a dye and pigment dispersant in the paint and coatings industry, and as a surfactant in the personal care industry. Additionally, 2-Pyrrolidone can be utilized as a catalyst and electrolyte in the production of lithium ion batteries.