

Technical Data Sheet

Basic information

Chemical name	Polyvinylpyrrolidone-K
Synonyms	PVP K, Povidone K (K30 K15 K17 K25 K30 K45 K60 K90 K120 etc.)
CAS.No.	9003-39-8

Physical properties

Appearance	White or white-off powder
Density, 20°C, g/cm ³	1.69
Boiling point, °C	N/A
Melting point, °C	~165
Flash point, °C	N/A
Refractive index	N/A
Solubility	Soluble in water, chlorine solvent, ethanol, amine, nitroalkane and low molecular weight fatty acids. Soluble with most of the inorganic salts and a variety of resin. Insoluble in acetone, ether and so on.

Specification

PVP-K		K12	K15	K17	K25	K30	K90
Appearance		White fine powder					
K value		10.2-13.8	12.75-17.3	15.3-18.4	22.5-27.0	27-32.4	81-97.2
Vinylpyrrolidone (Impurity A)	USP26) %max	0.1	0.1	0.1	0.1	0.1	0.1
	(USP36/EP6) ppm max	10	10	10	10	10	10
Moisture, % max		5.0	5.0	5.0	5.0	5.0	5.0
Solid content, % min		95	95	95	95	95	95
pH value (5% in aqueous solution)		3.0-5.0	3.0-5.0	3.0-5.0	3.0-5.0	3.0-5.0	4.0-7.0
Sulphate Ash, % max		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
2-Pyrrolidone (Impurity B), % max		3.0	3.0	3.0	3.0	3.0	3.0
Aldehyde (as acetaldehyde), ppm max		500	500	500	500	500	500
Heavy metal (as Pb), ppm max		10	10	10	10	10	10
Hydrazine, ppm max		1	1	1	1	1	1
Peroxide (As H ₂ O ₂), ppm max		400	400	400	400	400	400

* **USP42 EP69.0** is available. Please contact us for details if you need.

Application

Pharma Grade:

- Mainly used as binder for tablet
- Dissolving assistant for injection
- Flow assistant for capsule
- Dispersant for liquid medicine and pigment
- Stabilizer for enzyme and heat sensitive drug
- Coprecipitant for poorly soluble drugs lubricator etc

Cosmetic Grade:

Film-formers, thickeners, lubricants, and binders in hair-setting lotions Detoxifiers and detergents in shampoos and toothpastes.
Dispersants in hair colors Lubricants in skin care products.
Coatings and dispersants for pigments.
Thickeners and adhesives in glue sticks and pick-upadhesives. Smoothing agents in glass fibers sizing.

Tech Grade:

Anti-redeposition and anti-dye transfer agents in laundry detergents Stabilizers for suspensions, dispersions and emulsions.
Protective colloids and polymerization stabilizers in synthetic resins. Protective colloids and dispersants in paints and coatings.
Viscosity adjustors in printing inks and writing inks. Auxiliaries in paper coating and strengthening.
Stabilizers in carbon black ink or paints.

Package

25kg /fiber drum, 9mt/20''container, 18mt/40''container

Safety on transportation

It belongs to common goods, always refer to MSDS.

Storage and handling

Keep tightly closed, store in a cool dry place.
Please refer to the Materials Safety Data Sheet (MSDS) for the handling methods.

The information above is believed to be accurate and represents the best information currently available to us. However, In no event shall we be liable for any claims, losses, or damages of any third party resulting from its use.

Issue Date: 1st 12, 2016