

---

# Boai NKY Pharmaceuticals Ltd

Small enough to care, Big enough to deliver

 **Univar**Solutions

## Solutions for the Pharmaceutical Industry

Univar is proud to provide PVP (polyvinylpyrrolidone) and PVM/MA Polymer families from Boai NKY Pharmaceuticals Ltd, a global specialty chemicals company with over 30 years of experience in manufacturing. KoVidone® and PolyKoVidone® representing Povidone, Crospovidone and Copovidone pharmaceutical excipients. The OraRez® line of PVM/MA copolymer and derivatives representing functional polymers for bioadhesive/mucoadhesive applications.

Boai NKY was established in 1987 and is publically traded on Shenzhen Stock Exchange. Completely back-integrated to the basic raw materials with a global presence for PVP, PVPP, PVP/VA64 and PVM/MA.

Boai NKY is the first Chinese excipient manufacturer to receive EXCiPACT cGMP certification. With a state of the art manufacturing facility (commissioned 2013) and an established R&D and technical centre, Boai NKY is committed to the development of new products and technologies to bring new solutions and value to their customers.

### Quality

Boai NKY's pharmaceutical and nutraceutical grade products are compliant with world-wide regulatory requirements for human consumption. All products are handled and packaged in class D cleanrooms and are produced in accordance with the following requirements and guidelines:

- EC regulatory
- FDA regulatory
- China regulatory
- ICH Q7A
- EXCiPACT™
- GMP excipient certification
- IPEC

All QC equipment and test methods are fully validated and are audit trail compliant. The Technical Research Center and Pilot manufacturing facility assist customers with formulation development.

### Packaging

- Product is supplied in the following containers:
- Double PE-lined cardboard drums; 25kgs/drum for all products.
- Double PE-lined plastic drums; 25kgs/drum for PVP products and 20kgs/drum for PVPP and PVP/VA products.
- Storage condition: airtight containers.
- Retest Period: 36 months from the manufacturing date.



## Applications

- KoVidone® K products are typically used as a superior binder in Wet Granulation tableting processes acting as a glue between the granulation particles. Furthermore it is used as a solubilizer, thickener, suspension stabilizer and film-former.
- KoVidone® VA64 and VA64F have been developed as excellent binders for Direct Compression tableting process.
- KoVidone® VA64 is also suitable to use as a binder in Hot Melt Extrusion process and it is the perfect product to solubilize API's for sprays.
- PolyKoVidone® can be used as a super-disintegrant in tablets due to a capillary action that enables water penetration. It is very suitable for ODT tablets
- KoVidone®-I is a water-soluble PVP-Iodine complex with a broad spectrum of biocidal activity that is mild to both skin and mucosa.
- Boai NKY also offers N-Vinylpyrrolidone (NVP) and 2-Pyrrolidone (2P). These are intermediates of the PVP production. NVP can be used as a reactive diluent and 2P can be used as solubilizer for injectable drug actives.



Product	Grades	K-value	Mw	Application Overview	SOLID DOSAGE FORMS					LIQUID & SEMI-SOLID DOSAGE FORMS							
					Tablet	Capsule	Coating	Sustained Release	Granulation	Injection	Eye Drops	Oral Solutions	Suspensions	External Uses	Transdermal	Sprays	
Povidon (PVP)	KoVidone® K12	10.2-13.8	2,500	Solubilizer, dispersant and anti-crystallization agent in liquid dosage applications	●	●				PF	PF						
	KoVidone® K15	12.8-17.3	7,000		●	●				PF	PF						
	KoVidone® K17	15.3-18.4	9,000		●	●				PF	PF						
	KoVidone® K25	22.5-27.0	30,000	Binder, film-former, solubilizer, suspension stabilizer and dispersant in dosage form applications	●	●	●	●	●			●	●	●	●		
	KoVidone® K30	27.0-32.4	50,000		●	●	●	●	●		PF	●	●	●	●		
	KoVidone® K60	54.0-64.8	335,000	Binder, thickener or suspension stabilizer in dosage form applications	●	●		●	●			●	●	●	●		
	KoVidone® K90	81.0-97.2	1,250,000		●	●		●	●			●	●	●	●		
Copovidone (VA64)	KoVidone® VA64 and VA64F			Film-former; Binder wet or dry granulation and direct compression (VA64F) processes; hot melt extrusion.	●	●	●	●	●							●	
		<b>Particle Size (micron)</b>															
Crosspovidone (PVPP)	PolyKoVidone® XL		50-300	Super disintegrants; solubility enhancer; suspension stabilizer.	●	●			●					●		●	
	PolyKoVidone® XL-10		10-50		●	●			●					●		●	
		<b>Iodine Content</b>															
PVP-Iodine	Standard		10-12%	Mild biocide													
2-Pyrrolidone (2P)				Solubilizer/solvent for injectable drug actives													
N-Vinylpyrrolidone (NVP)				Reactive monomer for polymer synthesis													

PF = Pyrogen Free



**Contact:**

For more information on this range of Products please contact your local Univar Solutions representative at **pharmaEMEA@UnivarSolutions.com**