## VIVAPHARM ${ }^{\circledR}$ PVP/VA 64

Copovidone, Ph. Eur., NF, JPE, E 1208, FCC


Zooming in on Product Quality
Stringent Specification
High Purity
Superb Quality

## VIVAPHARM ${ }^{\oplus}$ PVP/VA 64

Stringent Specification • High Purity • Superb Quality

VIVAPHARM ${ }^{\circledR}$ PVP/VA 64, the ultimate tablet binder for all processing technologies (wet and dry granulation, direct compression, HME), is suitable for pharmaceutical and nutraceutical applications.
Full Regulatory Compliance with:
-Ph. Eur.
-NF
-JPE
-E 1208
-FCC

JRS PHARMA has defined very low internal impurity limits for
-Aldehydes
-Vinylpyrrolidone
-2-Pyrrolidone
-Peroxide

Reactive impurities, such as peroxides, can cause drug instability, leading to loss in potency, and formation of potentially toxic degradants.

JRS PHARMA has, therefore, defined peroxide limits well below the compendial requirements for product release.

VIVAPHARM ${ }^{\circledR}$ PVP/VA is analyzed and released at the Analytical Competence Center in Pirna, Gemany.

| PVP/VA 64 | Tightest Compendial <br> Limit (Pharmaceutical <br> Monographs) | VIVAPHARM ${ }^{\text {® PVP/VA } 64}$ | Competitor A | Competitor B |
| :--- | :---: | :---: | :---: | :---: |
| Impurities |  |  |  |  |
| Aldehydes | $\leq 500 \mathrm{ppm}$ | $\leq 500 \mathrm{ppm}$ | $\leq 500 \mathrm{ppm}$ | $\leq 500 \mathrm{ppm}$ |
| 1-Vinyl-2-pyrrolidone (Impurity A) | $\leq 10 \mathrm{ppm}$ | $\leq 5 \mathrm{ppm}$ | $\leq 5 \mathrm{ppm}$ | $\leq 10 \mathrm{ppm}$ |
| 2-Pyrrolidone (Impurity B) | $\leq 0.5 \%$ | $\leq 0.5 \%$ | $\leq 0.5 \%$ | $\leq 0.5 \%$ |
| Peroxides | $\leq 400 \mathrm{ppm}$ | $\leq 400 \mathrm{ppm}$ | $\leq 400 \mathrm{ppm}$ | $\leq 400 \mathrm{ppm}$ |
| Vinyl Acetate | $\leq 10 \mathrm{ppm}$ | $\leq 5 \mathrm{ppm}$ | $\leq 5 \mathrm{ppm}$ | $\leq 10 \mathrm{ppm}$ |
| Hydrazine | $\leq 1 \mathrm{ppm}$ | $\leq 1 \mathrm{ppm}$ | $\leq 1 \mathrm{ppm}$ | $\leq 1 \mathrm{ppm}$ |
| Heavy metals | $\leq 10 \mathrm{ppm}$ | $\leq 10 \mathrm{ppm}$ | $\leq 10 \mathrm{ppm}$ | $\leq 10 \mathrm{ppm}$ |
| Lead | $\leq 10 \mathrm{ppm}$ | $\leq 2 \mathrm{ppm}$ | - | - |
| Microbiology | - | $\leq 100 \mathrm{cfu} / \mathrm{g}$ | $\leq 100 \mathrm{cfu} / \mathrm{g}$ | $\leq 200 \mathrm{cfu} / \mathrm{g}$ |
| TAMC | - | $\leq 20 \mathrm{cfu} / \mathrm{g}$ | $\leq 100 \mathrm{cfu} / \mathrm{g}$ | $\leq 20 \mathrm{cfu} / \mathrm{g}$ |
| TYMC | - | Negative in 1 g | Pass equals negative | - |
| E. coli | Negative in 1 g | Pass equals negative | - |  |
| Ps. aeruginosa | - | Negative in 10 g | Pass equals negative | - |
| Salmonella | Negative in 1 g | Pass equals negative | - |  |
| Staph. aureus | - |  |  |  |

Tab 1 VIVAPHARM ${ }^{\ominus}$ PVP/VA 64 Impurities Overview Competitors

## 24 Months Production Impurity Data

## Aldehydes



## 2-Pyrrolidone



Vinylpyrrolidone


Vinyl Acetate


Peroxide


PHARMA

The Global Excipient Maker

## Regulatory and Quality Assurance

-EXCiPACT ${ }^{\text {TM }}$ GMP certified
-ISO 9001 and ISO 14001 certified
-Audit information questionnaire in accordance with
IPEC GMP Audit guideline for bulk pharmaceutical excipients (BPE)
-Conforms to Ph. Eur., NF, JPE monograph requirements -CEP, US and Chinese Drug Master Files (DMFs) available
-Halal certified
-Kosher certified
-Full documentation package and regulatory support available
-BSE / TSE free
-Genetically Modified Organisms (GMO) free
-Pesticide \& Herbicide free
-Allergen free
-Elemental Impurity Information according to ICH Q3D Guideline
-Tableting functionality regularly tested to ensure consistent quality and performance

## Global Network

GMP Manufacturing and Service Sites

Excipients

- Coatings
- Biopharma Services
- JRS Sales Companies (Additionally, dedicated representatives in almost every country.)
- Technical Competence Centers

Application Labs


