

## Summary of specifications for Dissolvine® Na<sub>2</sub>-P

An overview of the valid specifications for Dissolvine® Na<sub>2</sub>-P according to the following monographs:

- European Pharmacopoeia (Ph.Eur.), 2017 edition
- United States Pharmacopoeia (USP), 40, NF26
- Japanese Pharmacopoeia (JP), 14<sup>th</sup> edition
- Food Chemicals Codex (FCC), 10<sup>th</sup> edition
- American Chemical Society (ACS), 9<sup>th</sup> edition

In the last column the overall specification of the product, based on the most stringent legislations, is given.

| Spec item                 | Ph.Eur.  | USP                                 | JP  | FCC                                 | ACS               | Overall spec            |
|---------------------------|--|-------------------------------------|---|-------------------------------------|-------------------|-------------------------|
| Assay as dihydrate        | 98.5-101.0 %                                       |                                     | 99.0-101.0 %                                  | 99.0-101.0 %                        | 99.0-101.0 %      | 99.0-101.0 %            |
| Assay on anhydrous basis  |  | 99.0-101.0 %                        |   |                                     |                   | 99.0-101.0 %            |
| Identification            | -IR<br>-test on Ca<br>-test on EDTA<br>-test on Na | -IR<br>-test on EDTA<br>-test on Na | -test on EDTA<br>-test on EDTA<br>-test on Na | -IR<br>-test on Na<br>-test on EDTA |                   | passes tests            |
| pH (5%)                   | 4.0-5.5  | 4.0-6.0                             |   |                                     | 4.0-6.0<br>(25°C) | 4.0-5.5                 |
| pH (1%)                   |  |                                     | 4.3 – 4.7                                     | 4.3 - 4.7                           |                   | 4.3 – 4.7               |
| Heavy metals (as Pb)      | 20 ppm max   |                                     | 10 ppm max                                    |                                     | 0.005 % max       | 10 ppm max              |
| NTA-acid                  | 0.1 % max  | 0.1 % max                           |   | 0.1 % max                           |                   | 0.1 % max               |
| Residue on ignition       |  |                                     | 37.0-39.0 %                                   |                                     |                   | 37.0-39.0 %             |
| Appearance of 5% solution | clear & colorless                                  |                                     | clear & colorless                             |                                     |                   | clear & colorless       |
| Loss on drying            |  | 8.7-11.4 %                          |   |                                     |                   | 8.7-11.4 %              |
| Calcium                   |  | passes test                         |   | passes test                         |                   | passes test             |
| Cyanide                   |  |                                     | passes test                                   |                                     |                   | passes test             |
| Iron                      | 80 ppm max   |                                     |   |                                     | 0.01 % max        | 80 ppm max              |
| Arsenic                   |  |                                     | 2 ppm max                                     |                                     |                   | 1 ppm max <sup>*)</sup> |
| Lead                      |  |                                     |   | 10 ppm max                          |                   | 2 ppm max <sup>*)</sup> |
| Insolubles                |  |                                     |   |                                     | 0.005 % max       | 0.005 % max             |

<sup>\*)</sup> The specifications are stricter than they could be expected based on the above mentioned monographs. The reason is that these more strict specifications are from the Thai FDA regulations.