



XIAMEN KINGDOMWAY BIOTECH CO.,LTD.

| PRODUCT NAME                                    | Vitamin D <sub>3</sub> Powder 500,000IU/g Food Grade CWD                                          | TYPE                      | Food Grade              |
|-------------------------------------------------|---------------------------------------------------------------------------------------------------|---------------------------|-------------------------|
| Conform to <b>EP10.0</b>                        |                                                                                                   | Revision date: 2023/10/24 | File No.: XKG-B-0004-00 |
| ITEM                                            | SPECIFICATION                                                                                     | TEST METHOD               |                         |
| 1. Appearance                                   | White or off-white free flowing powder                                                            | Visual                    |                         |
| 2. Identification<br>HPLC                       | The retention time of the major peak of the sample solution corresponds to the standard solution. | HPLC                      |                         |
| 3. Loss on drying                               |                                                                                                   | USP <731>                 |                         |
| 4. Vitamin D <sub>3</sub> Content               |                                                                                                   | HPLC (EP)                 |                         |
| 5. Granularity: go through the sieve of 60 mesh | ≥ 90.0%                                                                                           | USP <786>                 |                         |
| 6. Water Dispersibility                         | Easily dispersed in cold water 15°C to form a homogeneous and stable emulsion                     | 1g/100ml water            |                         |
| 7. Heavy Metal                                  | ≤ 10ppm                                                                                           | USP <231>                 |                         |
| 8. Lead                                         | ≤ 2ppm                                                                                            | AAS                       |                         |
| 9. Arsenic                                      | ≤ 1ppm                                                                                            | AFS                       |                         |
| 10. Mercury                                     | ≤ 0.1ppm                                                                                          | AFS                       |                         |
| 11. Cadmium                                     | ≤ 1ppm                                                                                            | AAS                       |                         |
| 12. Microbial Limit Test                        |                                                                                                   |                           |                         |
| (1) Total Plate Count                           | ≤ 1000cfu/g                                                                                       | USP <2021>                |                         |
| (2) Yeast & Mold                                | ≤ 100cfu/g                                                                                        | USP <2021>                |                         |
| (3) Coliforms                                   | ≤ 0.3MPN/g                                                                                        | USP <2022>                |                         |
| (4) E. Coli                                     | Negative/10g                                                                                      | USP <2022>                |                         |
| (5) Salmonella                                  | Negative/25g                                                                                      | USP <2022>                |                         |
| (6) S.aureus                                    | Negative/25g                                                                                      | USP <2022>                |                         |

|                                                    |        |                                                                                                                                                                     |                                                                               |                                                                                                                                                                                                                                                                                                                                        |
|----------------------------------------------------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| SHELF LIFE<br>(UNOPENED)                           |        | 24 months                                                                                                                                                           |                                                                               | <div>MANUFACTURING<br/>PROCESS</div> <div><div>Oil phase + Water phase</div><div>↓</div><div>Emulsification</div><div>↓</div><div>Spray-drying</div><div>↓</div><div>Sieving</div><div>↓</div><div>Mixing</div><div>↓</div><div>Vitamin D<sub>3</sub> Powder</div><div>↓</div><div>Packaging</div><div>↓</div><div>Product</div></div> |
| STORAGE                                            |        | Store in tightly closed original container, protected from light, in a dry place at room temperature (max. 25°C). Once it opened, please use it up in a short time. |                                                                               |                                                                                                                                                                                                                                                                                                                                        |
| NUTRITIONAL INFORMATION (PER 100G OF RAW MATERIAL) |        |                                                                                                                                                                     |                                                                               |                                                                                                                                                                                                                                                                                                                                        |
| ITEM                                               | UNIT   | VALUE                                                                                                                                                               | NRV%                                                                          |                                                                                                                                                                                                                                                                                                                                        |
| 1. Energy                                          | KJ     | 1720                                                                                                                                                                | 20%                                                                           |                                                                                                                                                                                                                                                                                                                                        |
| 2. Protein                                         | g      | 0                                                                                                                                                                   | 0                                                                             |                                                                                                                                                                                                                                                                                                                                        |
| 3. Total Fat                                       | g      | 6.6                                                                                                                                                                 | 11%                                                                           |                                                                                                                                                                                                                                                                                                                                        |
| 4. Carbohydrates                                   | g      | 86.3                                                                                                                                                                | 29%                                                                           |                                                                                                                                                                                                                                                                                                                                        |
| 5. Sodium                                          | mg     | 184                                                                                                                                                                 | 9%                                                                            |                                                                                                                                                                                                                                                                                                                                        |
| PACKAGING                                          |        | 5kg                                                                                                                                                                 | Outer: Carton (4bags/carton)<br>Inner: Vacuumed aluminum foil bags (5kg/bag)  |                                                                                                                                                                                                                                                                                                                                        |
|                                                    |        | 20kg                                                                                                                                                                | Outer: Carton (1bags/carton)<br>Inner: Vacuumed aluminum foil bags (20kg/bag) |                                                                                                                                                                                                                                                                                                                                        |
| ITEM                                               | ASSAY  | SOURCE                                                                                                                                                              | ORIGIN                                                                        |                                                                                                                                                                                                                                                                                                                                        |
| 1. Vitamin D <sub>3</sub> Crystal                  | 1.4%   | Synthetic                                                                                                                                                           | China                                                                         |                                                                                                                                                                                                                                                                                                                                        |
| 2. Corn Oil                                        | 1~15%  | Corn                                                                                                                                                                |                                                                               |                                                                                                                                                                                                                                                                                                                                        |
| 3. Modified Starch                                 | 35~50% | Corn                                                                                                                                                                |                                                                               |                                                                                                                                                                                                                                                                                                                                        |
| 4. Sucrose                                         | 5~15%  | Sugarcane                                                                                                                                                           |                                                                               |                                                                                                                                                                                                                                                                                                                                        |
| 5. Maltodextrin                                    | 25~40% | Corn                                                                                                                                                                |                                                                               |                                                                                                                                                                                                                                                                                                                                        |
| 6. Sodium Ascorbate                                | 0.5~1% | Synthetic                                                                                                                                                           |                                                                               |                                                                                                                                                                                                                                                                                                                                        |
| 7. Tocopherol                                      | 0.5~2% | Synthetic                                                                                                                                                           |                                                                               |                                                                                                                                                                                                                                                                                                                                        |
| 8. Silicon Dioxide                                 | 0~1%   | Chemical Reaction                                                                                                                                                   |                                                                               |                                                                                                                                                                                                                                                                                                                                        |