

**CERTIFICATE OF ANALYSIS**  
**HERBAL DRY EXTRACT (W.S)**

|   |                              |                         |  |
|---|------------------------------|-------------------------|--|
| Name of Product                         | : Akalkaro                   | Name of Customer        | :  |
| Botanical Name                          | : <i>Anacyclus Pyrethrum</i> | Product Code            | : AB 1008                                    |
| Part of Plant Used                      | : Root                       | HSN Code                | :1302  |
| CAS No.                                 | : 84787-64-4                 | IR No.                  | : ABPL/HRB/000/19-20                         |
| Final Extract Ratio                     | : HIGHER, 10:1, 5:1, 3:1     | Batch No.               | : ABPL/HRB/000/19-20                         |
| Preparation Type                        | : Extraction                 | COA No.                 | : ABPL/000/ANA-HRB/000/19-20                 |
| Solvent Used for Extraction             | : Aqueous/<br>Hydroalcoholic | Date of Analysis        | :  |
| Other Solvent (s) Used in Manufacturing | :                            | Mfg. Date               |  |
| Standardization                         | : Alkaloids                  | Exp. Date / Retest Date | : 2 years                                    |
| Carrier / Additives                     | : Maltodextrin               | Application             | : Pharmaceuticals, Cosmetics, Nutraceuticals |
| Excipients Used                         | :                            |                         |  |

| Sr. No.  | TEST   | HIGHER                               | 10:1                                 | 5:1                                  | 3:1                                  |
|----------|--|--------------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|
| <b>A</b> | <b>ORGANOLEPTIC CHARACTERISTICS</b>                            |                                      |                                      |                                      |                                      |
| 1.       | Color  | Brown to light brown Coloured powder | Brown to light brown Coloured powder | Brown to light brown Coloured powder | Brown to light brown Coloured powder |
| 2.       | Odor   | Characteristic                       | Characteristic                       | Characteristic                       | Characteristic                       |
| 3.       | Taste  | Characteristic                       | Characteristic                       | Characteristic                       | Characteristic                       |
| <b>B</b> | <b>PHYSICO-CHEMICAL PARAMETERS</b>                             |                                      |                                      |                                      |                                      |
| 1.       | Identification   | By TLC                               | By TLC                               | By TLC                               | By TLC                               |
| 2.       | Loss on Drying at 105 °C (% w/w)                               | NMT 7 %                              | NMT 7 %                              | NMT 5 %                              | NMT 5 %                              |
| 3.       | Total Ash at 600 °C ± 25 °C (% w/w)                            | NMT 12 %                             | NMT 12 %                             | NMT 12 %                             | NMT 12 %                             |
| 4.       | Acid Insoluble Ash (% w/w)                                     | NMT 2 %                              | NMT 2 %                              | NMT 2 %                              | NMT 2 %                              |
| 5.       | pH (1 % w/v Aqueous Solutions)                                 | 3 - 7                                | 3 - 7                                | 3 - 7                                | 3 - 7                                |
| 6.       | Bulk Density – Tapped (g/ml)<br>Bulk Density – Untapped (g/ml) | 0.2 – 1.0 g/ml<br>0.2 – 0.9 g/ml     | 0.2 – 1.0 g/ml<br>0.2 – 0.9 g/ml     | 0.2 – 1.0 g/ml<br>0.2 – 0.9 g/ml     | 0.2 – 1.0 g/ml<br>0.2 – 0.9 g/ml     |
| 7.       | Waters Soluble Extractive (% w/w)                              | NLT 70 %                             | NLT 70 %                             | NLT 70 %                             | NLT 70 %                             |
| 8.       | Alcohol Soluble Extractive 50 (% w/w)                          | NLT 70 %                             | NLT 70 %                             | NLT 70 %                             | NLT 70 %                             |
| 9.       | Mesh Size  | 60 - 80                              | 60 - 80                              | 60 - 80                              | 60 - 80                              |
| 10.      | <b>ASSAY OF ACTIVE : Alkaloids (By Gravimetric Method)</b>     |                                      | 0.3 - 0.5 %                          | 0.1 - 0.3 %                          | 0.08 - 0.1 %                         |

|          |                             |            |            |            |            |
|----------|-----------------------------|------------|------------|------------|------------|
| <b>C</b> | <b>HEAVY METALS – TOTAL</b> | NMT 20 ppm | NMT 20 ppm | NMT 20 ppm | NMT 20 ppm |
|----------|-----------------------------|------------|------------|------------|------------|

Regd. Office & Works: Plot No.28-A, Gandhi Oil Mill Compound, Near BDC Gorwa, Vadodara-390 016..



|          |                                 |                    |                    |                    |                    |
|----------|---------------------------------|--------------------|--------------------|--------------------|--------------------|
| 1.       | Lead                            | NMT 10 ppm         | NMT 10 ppm         | NMT 10 ppm         | NMT 10 ppm         |
| 2.       | Arsenic                         | NMT 1 ppm          | NMT 1 ppm          | NMT 1 ppm          | NMT 1 ppm          |
| 3.       | Cadmium                         | NMT 0.3 ppm        | NMT 0.3 ppm        | NMT 0.3 ppm        | NMT 0.3 ppm        |
| 4.       | Mercury                         | NMT 1 ppm          | NMT 1 ppm          | NMT 1 ppm          | NMT 1 ppm          |
| <b>D</b> | <b>MICROBIOLOGICAL ANALYSIS</b> |                    |                    |                    |                    |
| 1.       | Total aerobic count             | NMT 1000<br>CFU/gm | NMT 1000<br>CFU/gm | NMT 1000<br>CFU/gm | NMT 1000<br>CFU/gm |
| 2.       | Yeast and Moulds                | NMT 100<br>CFU/gm  | NMT 100 CFU/gm     | NMT 100<br>CFU/gm  | NMT 100<br>CFU/gm  |
| 3        | E. Coli                         | Absent             | Absent             | Absent             | Absent             |
| 4        | Pseudomonas Aeruginosa          | Absent             | Absent             | Absent             | Absent             |
| 5        | Salmonella                      | Absent             | Absent             | Absent             | Absent             |
| 6        | Staphylococcus Aureus           | Absent             | Absent             | Absent             | Absent             |

|               |   |
|---------------|---|
| <b>OTHERS</b> |   |
| PACKAGING     | Packed in food grade HDPE bags sealed in 1kg/2kg/5kg/25kg/50kg HDPE corrugated box/HDPE containers/ Open mouth carboys  |
| STORAGE       | Air tight container, protect from heat and moisture   |
| SHELF LIFE    | Best before 24 months under the specified storage conditions.   |
| LABELLING     | The label displays Product name, Lot number, Net weight, Gross weight, Date of analysis, Manufacturing Date, Expire Date and other Information / marks specified by the customer. |
| GMO STATEMENT | This product and the raw materials used to produce said product are free from GMO   |
| HANDLING      | Wear face shields/Mouth Cap/Goggles and hand gloves while handling.   |

OPINION OF THE ANALYST: The above material complies with the prescribed standards.

Prepared By

Checked by

Approved by