

# LIPOSOME CHARACTERISATION ANALYSIS

Date: 15/07/24

## PRODUCT DETAILS:

|              |  |              |          |
|--------------|--|--------------|----------|
| Product name | REDACTED INFORMATION   | Manufacturer | REDACTED |
| Ingredients  | Purified Water, Glycerol, Phospholipids (from sunflower), Magnesium Bisglycinate, REDACTED INFORMATION |              |          |

## ORGANOLEPTIC:

|   | ANALYSIS          | METHOD            | RESULTS        | CONCLUSION                   |
|---|-------------------|-------------------|----------------|------------------------------|
| 1 | Odour             | Organoleptic      | Apple smell    | Pleasant                     |
| 2 | Appearance        | Visual Inspection | Light brown    | The product was crystallised |
| 3 | Taste             | Organoleptic      | Apple taste    | Pleasant                     |
| 4 | Texture/viscosity | Visual inspection | Viscous liquid | Free flowing thick liquid    |

## MICROMETRIC PROPERTIES:

|   | ANALYSIS                         | METHOD     | RESULTS  | CONCLUSION |
|---|----------------------------------|------------|----------|------------|
| 1 | Particle Size (Nm)               | Zetasizer  | 332.3    | PASS       |
| 2 | Particle Size Distribution (PDI) | Zetasizer  | 0.344    |            |
| 3 | Lipid Detection                  | Sudan test | NEGATIVE | FAIL       |
| 4 | PH                               | Ph meter   | 4.9      | PASS       |

## CONTAMINATIONS (Microbiology)

| S. NO. | ITEM                 | SPEC. (CFU/G) | RESULT (CFU/G) | METHODS        |
|--------|----------------------|---------------|----------------|----------------|
| 1      | TPC                  | $< 10^6$      | $< 10^6$       | Ph. Eur. 5.1.4 |
| 2      | Aerobic Plate Count  | $< 10^4$      | $< 10^4$       | AOAC 990.12    |
| 3      | Yeast and Mold Count | $< 10^2$      | $< 10^2$       | AOAC 997.02    |

## CONCLUSION:

- Product was tested using a validated method (Sudan III test.)  
Result was negative - there were no distinct layers in the sample, and there were no phospholipids present in the sample.

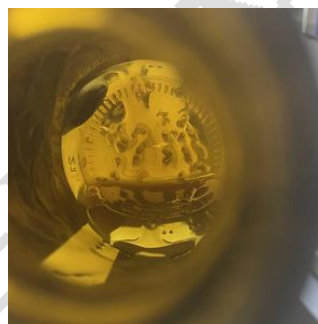


Sample under Sudan III test



Control under Sudan III test

- On evaluation of visual appearance, crystals were observed stuck to the inside of bottle.



Observation of crystals in sample

- This product does not contain any Vitamin E which acts as a protectant for liposomes.

SSR approval

|             | Print name           | Position                   | Signature | Date       |
|-------------|----------------------|----------------------------|-----------|------------|
| Operated by | Elnaz Salehian       | R&D Scientist              | ES        | 20/07/2024 |
| Reviewed by | Dr. Hanan Abdalmaula | Lead Scientific Researcher | HA        | 24/07/2024 |
| Approved by |                      |                            |           |            |

EXAMPLE REPORT

