



CERTIFICATE OF ANALYSIS

|                               |                                                  |                                                                              |               |                                                          |
|-------------------------------|--------------------------------------------------|------------------------------------------------------------------------------|---------------|----------------------------------------------------------|
| Product Name                  |                                                  | Methyl Beta Cyclodextrin                                                     | Batch No.     | JL20250419                                               |
| CAS                           |                                                  | 128446-36-6                                                                  | MF Date       | APR.19,2025                                              |
| Packing                       |                                                  | 10KG/DRUM                                                                    | Analysis Date | APR.19,2025                                              |
| Quantity                      |                                                  | 3000kg                                                                       | Expiry Date   | APR.18,2027                                              |
| ITEM                          |                                                  | STANDARD                                                                     |               | RESULT                                                   |
| Appearance                    |                                                  | White or almost white,amorphous or crystalline powder.Very soluble in water. |               | White amorphous powder.Very soluble in water             |
| Identification                | Add ethanol solution with 10% $\alpha$ -naphthol | Purple ring appears at the interface of the two liquids.                     |               | Purple ring appears at the interface of the two liquids. |
| pH                            |                                                  | 5.0~7.5                                                                      |               | 6.0                                                      |
| Clarity and color of solution |                                                  | The solution is colorless to yellowish clear solution.                       |               | Conform                                                  |
| Chlorid(%)                    |                                                  | $\leq 0.2$                                                                   |               | $< 0.2$                                                  |
| Impurity absorbance           | 230~350nm(10% solution)                          | $\leq 1.00$                                                                  |               | 0.095                                                    |
|                               | 350~750nm(110% solution)                         | $\leq 0.10$                                                                  |               | 0.0075                                                   |
| Related Substance(%)          | Betadex                                          | $\leq 0.5$                                                                   |               | 0.015                                                    |
|                               | Sum of imourities(excent Betadex)                | $\leq 1.0$                                                                   |               | Absent                                                   |
| Water Content(%)              |                                                  | $\leq 5.0$                                                                   |               | 2.9                                                      |
| Residue on Ignition(%)        |                                                  | $\leq 0.5$                                                                   |               | 0.07                                                     |
| Heavy Metal(ppm)              |                                                  | $\leq 10$                                                                    |               | $< 10$                                                   |
| Reducing substances(%)        |                                                  | $\leq 0.5$                                                                   |               | $< 0.5$                                                  |



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|                                            |                                                        |             |         |
|--------------------------------------------|--------------------------------------------------------|-------------|---------|
| Average Degree of Substitution             |                                                        | 10.0~13.3   | 12.0    |
| Methanol(%)                                |                                                        | $\leq 0.01$ | 0.00010 |
| Methyl<br>ptoluenesulfonate(ppm)           |                                                        | $\leq 1$    | 0.085   |
| Paratoluenesulfonic acid<br>Sodium salt(%) |                                                        | $\leq 0.05$ | Absent  |
| Microbial<br>Limit                         | The Total Aerobic<br>Microbial Count(cfu/g)            | $\leq 10^2$ | 10      |
|                                            | The Total Combined<br>Molds<br>and Yeasts Count(cfu/g) | $\leq 10^2$ | <10     |
|                                            | Escherichia Coli<br>(cfu/10g)                          | Absent      | Absent  |
|                                            | Salmonella(cfu/10g)                                    | Absent      | Absent  |
| Conclusion                                 |                                                        | Qualified   |         |

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