

**CERTIFICATE OF ANALYSIS****INVOICE: №260122****DATE: 26.01.22**

|   |            |                   |   |
|---|------------|-------------------|---|
| <b>Product name: Ethylthiobenzimidazol hydrobromide</b> |            |                   |   |
| Batch No.   | 011020     | Batch Quantity    | 20 kg   |
| CAS No.   | 14610-11-8 | Molecular Formula | C <sub>9</sub> H <sub>10</sub> N <sub>2</sub> S * HBr |
| Mfg. Date   | 10/2020    | Exp. Date         | 10/2023   |

| No. | Test                               | Specification  | Result                   |
|-----|------------------------------------|--|--------------------------|
| 1   | Description                        | White or off-white crystalline powder  | White crystalline powder |
| 2   | Assay                              | Not less than 99,0 (calculated on the dried product)   | 99,7 %                   |
| 3   | Identification<br>3.1 IR           | The IR spectrum of the product according to the position of the absorption bands should concordant to the standard IR spectrum | Conforms                 |
|     | 3.2 UV<br>3.3 Qualitative reaction | Qualitative reaction with ninhydrin solution. The color of the solution in the purple col-or                                   | Conforms                 |
| 4   | Solubility                         | Easily soluble in 95% Ethanol, slightly soluble in chloroform  | Conforms                 |
| 5   | Melting temperature                | 166 °C to 172 °C   | 171,6                    |
| 6   | pH                                 | 2,5 to 3,0 (2,0 % solution in water)   | 2,7                      |
| 7   | Residual organic solvent           | Ethanol – not more than 0,5%   | 0,04%                    |
| 8   | Impurities                         | Not more than 0,5 %  | Less than 0,5 %          |
| 9   | Storage                            | In the light protected place at a temperature no higher than 25°C  |                          |

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