

## Test Report

| Sample       |  |                 |                  |
|--------------|--|-----------------|------------------|
| Name         | Solution 2                                     | Number          | W20200428-006    |
| Weight       | /  | Formulation     | /                |
| Receipt Time | 2020/04/28                                     | Test Time       | 2020/05/08-05/11 |
| Description  | \  |                 |                  |
| Test         |  |                 |                  |
| Test Item    | Content determination of N, N- dimethylaniline |                 |                  |
| Standards    |  |                 |                  |
| Reference    | Provided by customer                           | Standard Sample | Yes              |
| Instrument   |  |                 |                  |
| Type         | HPLC   | Version         | Shimadzu LC-20AD |

● **Chromatographic Condition:**

|                  |                                       |
|------------------|---------------------------------------|
| Column           | Welch Ultisil® XB-C18(4.6×250mm, 5um) |
| Mobile Phase     | Water/acetonitrile=50/50              |
| Wavelength       | 254nm                                 |
| Temperature      | 40°C                                  |
| Flow Rate        | 1.0 ml/min                            |
| Injection Volume | 10 µL                                 |
| Notes            | /                                     |

● **Preparation of Mobile Phase:**

Mobile phase: take 500mL pure water and 500mL pure acetonitrile, then mix well to degas.

Unless otherwise stated, the results shown in this test report refer only to this sample tested.

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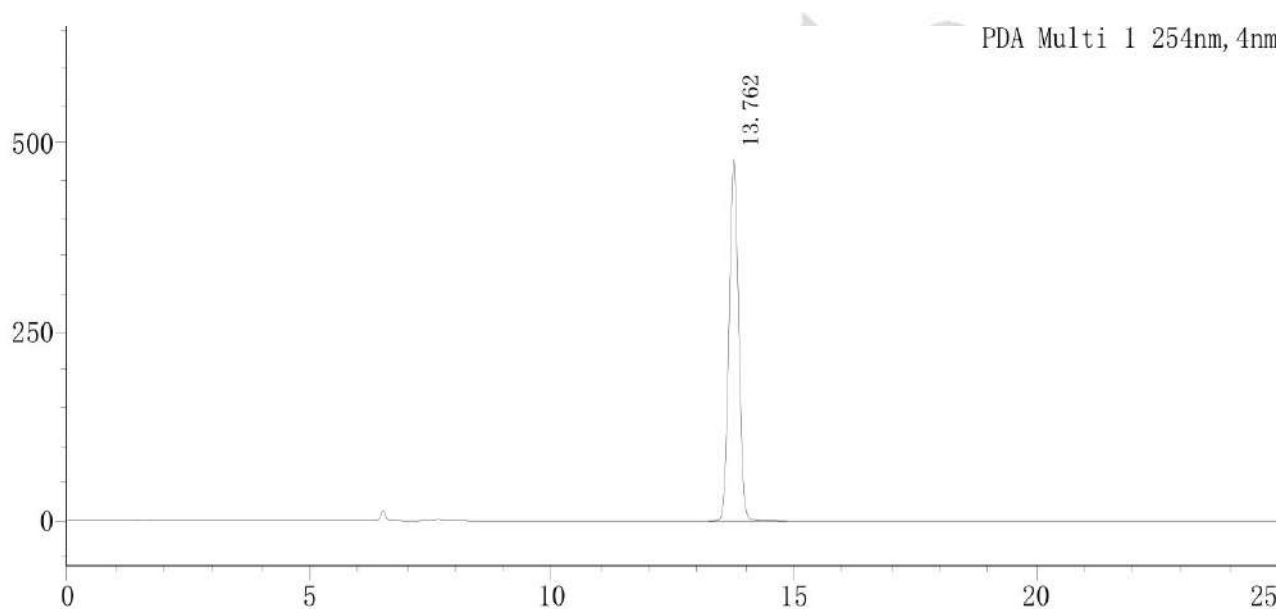
● **Preparation of Sample Solution:**

Test solution: take proper amount of sample and add mobile phase to dissolve and dilute the solution to 50mg/mL.

Single standard of N, N-dimethylaniline: take an appropriate amount of sample and add mobile phase to dissolve the solution diluted to 0.1mg/mL.

● **Chromatogram and Data:**

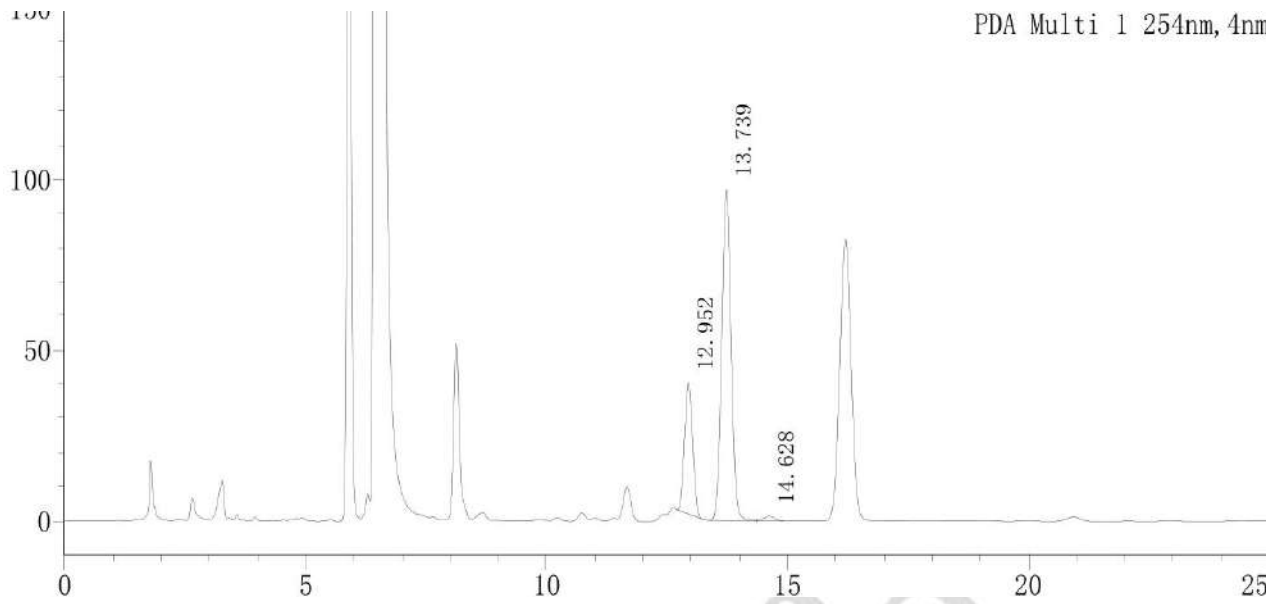
**1. Single standard of N, N-dimethylaniline**



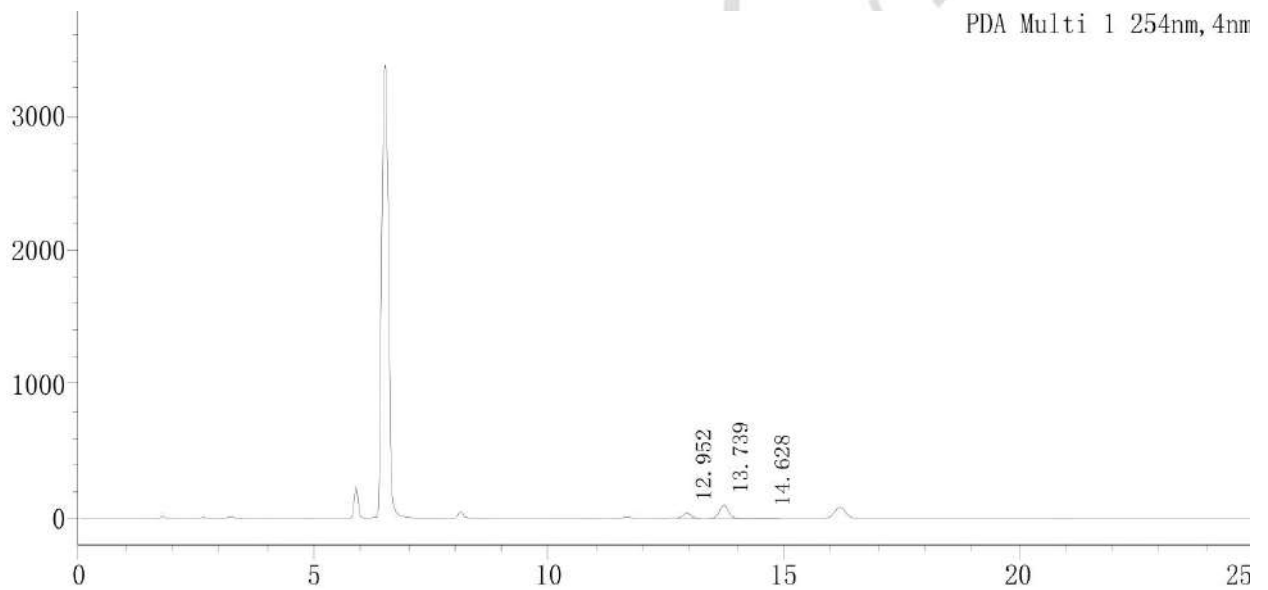
| No. | Rt     | Area    | Height | Plates | Tailing factor | Resolution |
|-----|--------|---------|--------|--------|----------------|------------|
| 1   | 13.762 | 6620176 | 478886 | 21636  | 1.026          | --         |

**2. Test solution**

**2.1. Part of scale**



2.2. Fullscale



| No. | Rt     | Area    | Height | Plates | Tailing factor | Resolution |
|-----|--------|---------|--------|--------|----------------|------------|
| 1   | 12.952 | 452791  | 38509  | 25051  | 1.041          | --         |
| 2   | 13.739 | 1320100 | 97040  | 22360  | 1.039          | 2.264      |
| 3   | 14.628 | 19367   | 1374   | 23050  | --             | 2.362      |

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● **Conclusion:**

Conclusion: Using Ultisil® XB-C18(4.6×250mm, 5um) under this chromatographic condition can meet the test requirements.

Welch

**Signature**

Test: Hui Lin

Date: 2020/05/12

Revise: Xiaomei Wu

Date: 2020/05/12

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