



NHR ORGANIC OILS  
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*Certificate of Analysis & Gas Chromatography*  
**Organic Roman Chamomile Essential Oil**  
*(Anthemis nobilis)*

Batch number: 151025-4  
Origin: Bulgaria

Testing results:

| M1 | Name of characteristics | Testing method, standards | Name of sample                                | Testing results, uncertainty | Unit value | Index value and tolerance according to: Technical documentation | Conditions of testing              | departure from the Testing method |
|----|-------------------------|---------------------------|---|------------------------------|------------|---|------------------------------------|-----------------------------------|
| I  | 2                       | 3                         | 4   | 5                            | 6          | 7   | 8                                  | 9                                 |
| 1  | Relative density        | BOS ISO 279:200I          | <b>Chamomile Roman essential oil, organic</b> | <b>0,900 ± 0,006</b>         | -          | -   | (22,5 ± 0,1)°C<br>(45,0 ± 1,3)% Rh | no                                |



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1. Testing results:

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|-----|--|---------------------------|---|------------------------------|------------|---|--|-----------------------------------|
| 1   | <b>a-Pinene</b>  | BDS ISO 7609              | <b>Chamomile Roman essential oil, organic</b> | <b>6.61</b>                  | %          | -                                       | GC-FJD +<br>GC-FJD-MS<br>Agilent<br>column-<br>HP-Innowax-<br>60/0.250/0.25<br>Cyclodex-B<br>60/0.250/0.25 | no                                |
| 2   | <b>Isobutyl isobutanoate</b>                                     |                           |   | <b>0.95</b>                  | %          | -                                       |  |                                   |
| 3   | <b>Camphene</b>  |                           |   | <b>3.71</b>                  | %          | -                                       |  |                                   |
| 4   | <b>p-Pinene</b>  |                           |   | <b>10.57</b>                 | %          | -                                       |  |                                   |
| 5   | <b>Isobutyl methacrylate</b>                                     |                           |   | <b>0.74</b>                  | %          | -                                       |  |                                   |
| 6   | <b>Butyl 2-methylbutanoate</b>                                   |                           |   | <b>0.41</b>                  | %          | -                                       |  |                                   |
| 7   | <b>iso-Amyl iso-butyrate</b>                                     |                           |   | <b>0.94</b>                  | %          | -                                       |  |                                   |
| 8   | <b>Limonene</b>  |                           |   | <b>0.77</b>                  | %          | -                                       |  |                                   |
| 9   | <b>1.8 cineole</b>   |                           |   | <b>3.06</b>                  | %          | -                                       |  |                                   |
| 10  | <b>Amyl methacrylate</b>   |                           |   | <b>0.19</b>                  | %          | -                                       |  |                                   |
| 11  | <b>Butyl 3-methyl-2-butenate</b>                                 |                           |   | <b>4.63</b>                  | %          | -                                       |  |                                   |
| 12  | <b>Hexyl isobutyrate</b>   |                           |   | <b>0.10</b>                  | %          | -                                       |  |                                   |
| 13  | <b>Allyl -3-methyl-2-butenate</b>                                |                           |   | <b>0.20</b>                  | %          | -                                       |  |                                   |
| 14  | <b>Isopentyl 3-methyl-2-butenate +Pentyl 3-methyl-2-butenate</b> |                           |   | <b>7.85</b>                  | %          | -                                       |  |                                   |
| 15  | <b>Pinocarvone</b>   |                           |   | <b>1.42</b>                  | %          | -                                       |  |                                   |
| 16  | <b>Pinocarveol</b>   |                           |   | <b>1.99</b>                  | %          | -                                       |  |                                   |
| 17  | <b>Benzyl propionate</b>   |                           |   | <b>5.45</b>                  | %          | -                                       |  |                                   |
| 18  | <b>Geraniol</b>  |                           |   | <b>1.85</b>                  | %          | -                                       |  |                                   |
| 19  | <b>Geranyl propionate</b>  |                           |   | <b>5.45</b>                  | %          | -                                       |  |                                   |
| II  | <b>Refractive index</b>  | 6,D;C ISO 280:1999        |   | <b>1.469</b>                 | -          | -                                       | (23,0 ± 0,1)°C   |                                   |
| III | <b>Optical rotation</b>  | B,D;C ISO 592             |   | <b>-2.83</b>                 | °          | -                                       | (45,0±1,3)% Rh   |                                   |