



## ANALYSIS REPORT

|                 |  |                          |                      |      |
|-----------------|--|--------------------------|----------------------|------|
| <b>Client:</b>  | ApiHealth NZ Limited   | <b>Lab No:</b>           | 1174367              | SPV1 |
| <b>Contact:</b> | ApiHealth NZ Limited<br>19 Hawkins Street<br>Meadowbank<br>AUCKLAND 1072 | <b>Date Registered:</b>  | 02-Sep-2013          |      |
|                 |  | <b>Date Reported:</b>    | 05-Sep-2013          |      |
|                 |  | <b>Quote No:</b>         |                      |      |
|                 |  | <b>Order No:</b>         |                      |      |
|                 |  | <b>Client Reference:</b> |                      |      |
|                 |  | <b>Submitted By:</b>     | ApiHealth NZ Limited |      |

### Sample Type: Sugars and Sugar Confectionery

|               | Sample Name:        | MH 277      | MH 279      | MH 282      |   |   |
|---------------|---------------------|-------------|-------------|-------------|---|---|
|               |                     | 30-Aug-2013 | 30-Aug-2013 | 30-Aug-2013 |   |   |
|               | Lab Number:         | 1174367.1   | 1174367.2   | 1174367.3   |   |   |
| Methylglyoxal | mg/kg               | 796         | 819         | 513         | - | - |
| UMF®          | % Phenol Equivalent | 20.2        | 20.5        | 14.9        | - | - |

## SUMMARY OF METHODS

The following table(s) gives a brief description of the methods used to conduct the analyses for this job. The detection limits given below are those attainable in a relatively clean matrix. Detection limits may be higher for individual samples should insufficient sample be available, or if the matrix requires that dilutions be performed during analysis.

### Sample Type: Sugars and Sugar Confectionery

| Test          | Method Description   | Default Detection Limit | Samples |
|---------------|--|-------------------------|---------|
| Methylglyoxal | Aqueous dilution, derivatisation, SPME-GC analysis. Analysis performed at Hill Laboratories - Food & Bioanalytical Division, Waikato Innovation Park, Ruakura Lane, Hamilton.  | 5 mg/kg                 | 1-3     |
| UMF®          | UMF® is calculated using a correlation curve provided by the UMF Honey Association, relating UMF® to the primary active ingredient, methylglyoxal. Methylglyoxal is determined by aqueous dilution, derivatisation, and SPME-GC (in house). For details on UMF®, refer to Journal of Pharmacy and Pharmacology (1991), vol. 43, p. 817.<br>Analysis performed at Hill Laboratories - Food & Bioanalytical Division, Waikato Innovation Park, Ruakura Lane, Hamilton. | 5.0 % Phenol Equivalent | 1-3     |

These samples were collected by yourselves (or your agent) and analysed as received at the laboratory.

Samples are held at the laboratory after reporting for a length of time depending on the preservation used and the stability of the analytes being tested. Once the storage period is completed the samples are discarded unless otherwise advised by the client.

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