

**BulkActives**

3F., No.288, Sinfong St., Jhongjheng District, Keelung City 20251, Taiwan. Phone number: (+886) 961137419

**Certificate of Analysis****Product Name:** L(+)-DMAE BITARTRATE**Mfg.Date:** Nov 05, 2011**Batch Number :** 20111105**Test Date:** Nov 05, 2013

| Items                             | STANDARD                  | Results  |
|-----------------------------------|---------------------------|----------|
| appearance                        | white, crystalline powder | complies |
| solubility                        | water and ethanol         | complies |
| Content % min                     | 99 ~ 101                  | 99.5     |
| Dimethylaminoethanol<br>content % | 36.9 ~ 37.68              | 37.2     |
| Condition of water solution       | Passes test               | complies |
| Cd≤%                              | 0.0001                    | complies |
| Lead(Pb)%max                      | 10ppm                     | complies |
| PH                                | 3.2-3.8                   | 3.3      |
| Loss on drying %max               | 1                         | 0.4%     |
| Specific Rotation                 | +17.5 ~ +18.5             | +18.5    |
| Melting Point                     | 110-120°C                 | 113°C    |
| E. Coli                           | Negative                  | complies |
| Salmonelia                        | Negative                  | complies |
| Coliforms                         | Negative                  | complies |
| Yeast &Mould                      | NMT100cfu/g               | complies |
| Total plate count                 | NMT3000cfu/g              | complies |

**USABLE LIFE AND STORAGE**

Store in a cool and dry place. Keep away from strong light and heat. Store in tightly closed containers. When properly stored, this product has a usable life of 24 months from the date of production.

**LIMITATIONS**

This product is neither tested nor represented suitable for medical or pharmaceutical uses.

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**LIMITED WARRANTY – PLEASE READ CAREFULLY**

The information contained herein is offered in good faith based on BulkActives' research and information provided by manufacturers and distributors, and is believed to be accurate. However, because conditions and methods of use of our products are beyond our control, this information shall not be used in substitution for customers' tests to insure that BulkActives' products are fully satisfactory for your specific applications. Our warranty is that the product will meet its current sales specifications. Your exclusive remedy for breach of such warranty is limited to refund of purchase price or replacement of any product shown to be other than as warranted.