

# *Chem-Impex International, Inc.*

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## *Certificate of Analysis*

|                          |  |
|--------------------------|--|
| <b>Catalogue Number</b>  | 29862  |
| <b>Lot Number</b>        | 002241-05503231201   |
| <b>Product</b>           | <b>DL-<math>\alpha</math>-Lipoic acid</b><br>( $\pm$ )-1,2-Dithiolane-3-pentanoic acid |
| <b>CAS Number</b>        | 1077-28-7  |
| <b>Molecular Formula</b> | C <sub>8</sub> H <sub>14</sub> O <sub>2</sub> S <sub>2</sub>                           |
| <b>Molecular Weight</b>  | 206.33   |

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|----------------------------|--|
| <b>Appearance</b>          | Yellow crystalline powder  |
| <b>Solubility</b>          | Very slightly solution in water, freely solution in methanol   |
| <b>Melting Point</b>       | 61.0 - 61.5 °C   |
| <b>Heavy Metals</b>        | < 10 ppm   |
| <b>Yeast and Mold</b>      | 16 cfu/g   |
| <b>Optical Rotation</b>    | [ $\alpha$ ] <sub>D</sub> <sup>20</sup> = 0 °  |
| <b>Loss on Drying</b>      | 0.01%  |
| <b>Residual Solvents</b>   | Ethyl acetate : Not detected<br>Toluene : Not detected   |
| <b>E. Coli</b>             | Not detected   |
| <b>Microbial Count</b>     | 20 cfu/g (TPC)   |
| <b>Salmonella</b>          | Not detected   |
| <b>Mesh Size</b>           | 100% through 80 mesh   |
| <b>Related Substances</b>  | Individual impurity : Not detected<br>Total impurities : Not detected<br>Cyclohexane : Not detected  |
| <b>Residue On Ignition</b> | 0.03%  |
| <b>Assay</b>               | 99.1% (On dried basis)   |
| <b>Purity by TLC</b>       | No spot other than the alpha lipoic acid spot from the sample solution is more intense than the spot at R <sub>f</sub> = 0 from standard solution. |
| <b>Grade</b>               | Meets USP specification  |
| <b>Storage</b>             | Store at 0 - 8 °C  |

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**Additional Information**

Identification :

Test for A : Passes test

Test for B : Infrared spectrum : Conforms to structure

**Remarks**

See material safety data sheet for additional information

For laboratory use only

**The foregoing is a copy of the Certificate of Analysis as provided by our supplier**



**Bala Kumar**  
**Quality Control Manager**