



## Certificate of analysis

### Reference #: 2018052-031/348

Manufacturing date: **09/17/18**  
 Analysis date: **09/20/18**

|              |  |                   |  |        |                                     |
|--------------|--|-------------------|--|--------|-------------------------------------|
| Product name | <b>(t-Butylimido)tris(diethylamino)tantalum(V), 98+% (99.99%-Ta)</b> |                   |  |        |                                     |
| Ereztech #   | <b>TA6417</b>  | CAS#              | <b>169896-41-7</b>                                 | Purity | <b>99.59% by NMR H1 integration</b> |
| Lot/batch #  | <b>031/348</b>   | Net weight/volume | <b>1000g</b>                                       | Seal # | <b>N/A</b>                          |
| Packaging    | <b>2 glass ampules</b>   | Storage           | <b>Air, moisture sensitive. Shelf life 1 year.</b> |        |                                     |

| Analytical results |  |
|--------------------|--|
| Appearance         | <b>Light yellow liquid</b>   |
| NMR H1             | <b>Conforms to structure</b>   |
| Purity             | <b>99.59%</b>  |
| ICP, ppm           | <b>Al: 2</b><br><b>Fe: 3</b><br><b>Co: 0.05</b><br><b>Si: 5</b><br><b>Mn: 0.2</b><br><b>Mo: 0.07</b><br><b>Ni: 0.2</b><br><b>Ti: 0.5</b><br><b>Cr: 0.2</b><br><b>Nb: 5</b><br><b>W: 0.1</b><br><b>Ca: 19</b> |