



## CERTIFICATE OF ANALYSIS

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### 1. Identification

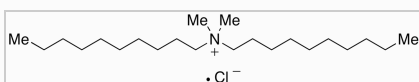
**Catalogue Number:** D439375

**CAS Number:** 7173-51-5

**Product:** Didecyl Dimethyl Ammonium Chloride

**Synonym:** N-Decyl-N,N-dimethyl-1-decanaminium Chloride; N-Decyl-N,N-dimethyl-1-decanaminium Chloride; Didecyl dimethyl ammonium Chloride; Didecyl dimethyl ammonium Chloride; AQ 210; Acticide DDQ; Acticide DDQ 40; Arquad 10; Arquad 210; Arquad 210-50; Arquad 210-50E; Arquad 210-80; Arquad 210-80E; Arquad 210-85E; Asepas 3; Astop; BTC 1010; BTC 2250; BTC 99; Bardac 22; Bardac 2240; Bardac 2250; Bardac 2270E; Bardac 2280; Bio-Dac; Britewood Q; Britewood XL; Calgon H 130; Catiogen DDM; Catiogen DDM-PG; Cation D

**Structure:**



**Molecular Formula:**

C<sub>22</sub>H<sub>48</sub>ClN

**Molecular weight:**

362.08

**Source of Product:**

N/A

**Solubility:**

Chloroform (Slightly), DMSO (Slightly), Methanol (Slightly), Water (Slightly)

**Lot Number:** 5-SXG-169-1

**Purity:** 96%

**Shipping Condition:** This Product Is Stable To Be Shipped At Room Temperature

**Storage Condition:** 4°C

### 2. Warning

**Warning 1:**

**Warning 2:**

**Warning 3:**

### 3. Analytical Information

| Tests:             | Specifications:          | Results:                       |
|--------------------|--------------------------|--------------------------------|
| Appearance         | Light Beige to Brown Gel | Light Beige to Beige Gel       |
| NMR                | Conforms to Structure    | Conforms                       |
| Elemental Analysis | Conforms                 | %C: 69.17, %H: 13.81, %N: 3.51 |
| HPLC Purity        | Report Result            | 99.64% (ELSD)                  |
| MS                 | Conforms to Structure    | Conforms                       |

**Additional Information:** N/A

Purity is based on the analytical results of the tests performed. NMR and Elemental Analysis (if available) may have an accuracy of  $\pm 2\%$ . Isotopic purity is based on mass distribution observed. The contents of the specifications are subject to change without advance notice, and the specification values displayed here are the most up to date values.

### 4. Signatures

| Reviewed By   | Reviewed By   | C of A Approved By  | Test Date | Retest Date |
|---|---|---|-----------|-------------|
| Henry Tieu  | Toni Rantanen   | Chanell Chu   | 3/10/2023 | 3/8/2027    |
|  |  |  |           |             |