



1,3-Didecyl-2-methylimidazolium chloride

1 6.2317.0X0 Titrant TEGO®trant A100

Titrant for the determination of anionic surfactants and soaps according to Evonik Goldschmidt GmbH.

1.1 Product information

Decomposition	265 - 271 °C
Solubility	Soluble in water, ethanol, isopropanol, acetone, chloroform Insoluble in ether, ligroin, petroleum ether
Water content	1 - 5% (slightly hygroscopic)
Quat N	3.35% (pH 10)
Surfactant N	3.38% (pH 3)
Molar mass	399.10 g/mol

1.2 Preparing a titrant solution

Please note the following important points when preparing the titrant solution:

- The product is not a reference material and is hygroscopic. The sample size needed for preparing an equimolar solution should thus be increased somewhat.
Example: In theory, for 1 L c = 0.004 mol/L, $0.004 \cdot 399.1 = 1.5964$ g are needed. We recommend weighing in **1.68 g**.
- For the reasons mentioned above, it is essential to determine a titer. We recommend using sodium dodecyl sulfate (see also Application Bulletin no. 233).
- Dissolve 1.68 g of TEGO®trant A100 in approx. 800 mL distilled or deionized water in a 1,000 mL volumetric flask (warm slightly if necessary). After the solution has cooled, fill with distilled water almost to the mark and allow to stand overnight. Then fill to the mark and carefully pour into the supply bottle of the exchange unit. Allow to stand for one day before determining the titer.
- As the product is a cationic surfactant, surfaces are covered by a part of it. We strongly recommend using always the same volumetric flasks, supply bottles and exchange units for this titrant. We also recommend that you ensure that the solution is free of foam, as surfactants can be enriched by up to a factor of 10 in the foam.

1.3 Additional information

Additional information can be found in the Metrohm Application Bulletin 233.