



Fidar shimi ramand ( Fidar shimi )  
Q.C. Laboratory  
Certificate of Analysis  
(Chemical & Physical Test)

**Form No. & Rev.**  
**FS100**  
**Form Revision**  
**Date:**  
**1402-03-31**

|                   |              |                         |       |
|-------------------|--------------|-------------------------|-------|
| No. Sample:       | -----        | Operator:               | ----- |
| Lab. Pressure:    | -----        | Date:                   | ----- |
| Lab. Temperature: | <b>20 °C</b> | Lab. Relative Humidity: | ----- |

**Name: Hydrochloridric Acid 37 %**

| NO.       | Test Description                          | Unit              | Results                  |
|-----------|-------------------------------------------|-------------------|--------------------------|
|           |                                           |                   | Corrected<br>(101.3 kpa) |
| <b>1</b>  | Density (20 °C)                           | g/cm <sup>3</sup> | 1.19                     |
| <b>2</b>  | pH value(H <sub>2</sub> O, 20 °C)         | -----             | <1                       |
| <b>3</b>  | Assay (alkalimetric)                      | %                 | ≥ 37.0                   |
| <b>4</b>  | Colour                                    | Hazen             | ≤ 10                     |
| <b>5</b>  | Free chlorine (Cl)                        | ppm               | ≤ 0.5                    |
| <b>6</b>  | Sulphate (SO <sub>4</sub> )               | ppm               | ≤ 1                      |
| <b>7</b>  | Fe (Iron)                                 | ppm               | ≤ 0.2                    |
| <b>8</b>  | NH <sub>4</sub> (Ammonium)                | ppm               | ≤ 1                      |
| <b>9</b>  | Na (Sodium)                               | ppm               | ≤ 0.5                    |
| <b>10</b> | Ni (Nickel)                               | ppm               | ≤ 0.02                   |
| <b>11</b> | Pb (Lead)                                 | ppm               | ≤ 0.02                   |
| <b>12</b> | Residue on ignition (as SO <sub>4</sub> ) | ppm               | ≤ 5                      |