

## PRODUCT IDENTITY

|                 |                                                                                 |                |                   |
|-----------------|---------------------------------------------------------------------------------|----------------|-------------------|
| PRODUCT NAME    | Magnesium chloride solution                                                     | PRODUCT NUMBER | M434103           |
| Grades & Purity | UltraBio™, Suitable for molecular biology, Ultra pure, ~1 M in H <sub>2</sub> O | VERSION        | 3                 |
| CAS NUMBER      | 7786-30-3                                                                       | FORMULA        | MgCl <sub>2</sub> |
| FORMULA WEIGHT  | 95.21g/mol                                                                      |                |                   |

## ACCEPTANCE CRITERIA

| PARAMETER           | SPECIFICATION / LIMIT |
|---------------------|-----------------------|
| Appearance(M434103) | Colorless Liquid      |
| Aluminium(Al)       | 0-1 (ppm)             |
| Barium(Ba)          | 0-1 (ppm)             |
| Bismuth(Bi)         | 0-1 (ppm)             |
| Cadmium(Cd)         | 0-1 (ppm)             |
| Calcium(Ca)         | 0-10 (ppm)            |
| Chromium(Cr)        | 0-1 (ppm)             |
| Cobalt (Co)         | 0-1 (ppm)             |
| Copper(Cu)          | 0-1 (ppm)             |

| PARAMETER                             | SPECIFICATION / LIMIT |
|---------------------------------------|-----------------------|
| Potassium(K)                          | 0-50 (ppm)            |
| Uv-Abs. At 260 nm                     | 0-0.05                |
| UV-ABS.at 280 nm                      | 0-0.03                |
| Iron(Fe)                              | 0-1 (ppm)             |
| Concentration(Titration)              | 0.97-1.03 (mol/L)     |
| Density(D20/4°C)                      | 1.07-1.085            |
| Lithium(Li)                           | 0-1 (ppm)             |
| Manganese(Mn)                         | 0-1 (ppm)             |
| Molybdenum(Mo)                        | 0-1 (ppm)             |
| Sodium(Na)                            | 0-500 (ppm)           |
| Nickel(Ni)                            | 0-1 (ppm)             |
| Lead(Pb)                              | 0-1 (ppm)             |
| Strontium(Sr)                         | 0-1 (ppm)             |
| Zinc(Zn)                              | 0-1 (ppm)             |
| Arsenic(As)                           | 0-0.1 (ppm)           |
| Total sulfur as SO <sub>4</sub> (ICP) | 0-50 (ppm)            |
| pH                                    | 5.0-7.5               |

| PARAMETER                               | SPECIFICATION / LIMIT |
|-----------------------------------------|-----------------------|
| Total Nitrogen                          | 0-2 (ppm)             |
| Phospate(PO4)                           | 0-10 (ppm)            |
| Residue (filter test)                   | no residue            |
| Dnases, Rnases, Proteases, Phosphatases | None Detected         |