

Code No.13-1873

## SPECIFICATION

## Methanol

for Electronics Industry

| REQUIREMENT   | SPECIFICATION          |
|---|------------------------|
| Appearance  | Colorless clear liquid |
| Solubility in water   | to pass test           |
| Density (20°C)  | 0.789~0.792g/mL        |
| Refractive index 20°C   | 1.327~1.330            |
| Water   | max.0.1%               |
| Residue after evaporation                                     | max.1ppm               |
| Acidity (as HCOOH)  | max.20ppm              |
| Alkalinity (as NH <sub>3</sub> )                              | max.1ppm               |
| Acetone and aldehydes (as CH <sub>3</sub> COCH <sub>3</sub> ) | max.2ppm               |
| Ethyl alcohol (C <sub>2</sub> H <sub>5</sub> OH)              | to pass test           |
| Substances reducing permanganate (as O)                       | to pass test           |
| Substances darkened by sulfuric acid                          | to pass test           |
| Assay (capillary GC)  | min.99.7%              |
| Silver (Ag)   | max.1ppb               |
| Aluminium (Al)  | max.10ppb              |
| Barium (Ba)   | max.5ppb               |
| Calcium (Ca)  | max.1ppb               |
| Cadmium (Cd)  | max.1ppb               |
| Cobalt (Co)   | max.1ppb               |
| Chromium (Cr)   | max.2ppb               |
| Copper (Cu)   | max.2ppb               |
| Iron (Fe)   | max.5ppb               |
| Potassium (K)   | max.3ppb               |
| Lithium (Li)  | max.1ppb               |
| Magnesium (Mg)  | max.5ppb               |
| Manganese (Mn)  | max.1ppb               |
| Sodium (Na)   | max.50ppb              |
| Nickel (Ni)   | max.5ppb               |
| Lead (Pb)   | max.1ppb               |

|                                 |                     |
|---------------------------------|---------------------|
| Strontium (Sr)                  | max.1ppb            |
| Zinc (Zn)                       | max.5ppb            |
| Particles (0.5 $\mu$ m or more) | under investigation |