

# Product Specification

Name : **Methanol**

Another name : Methyl alcohol

Grade : EL-S

Volume : 1L

Specification number : EL-028-09

Issue number : CFI07

Code number : 51055586

HAYASHI PURE CHEMICAL IND.,LTD.

3-2-12 UCHIHIRANOMACHI,CHUO-KU, OSAKA 540-0037, JAPAN

| No. | Item                                    | (unit)    | Specification         |  |
|-----|-----------------------------------------|-----------|-----------------------|--|
| 1   | Appearance                              | -         | Colorless transparent |  |
| 2   | Assay                                   | %         | min. 99.8             |  |
| 3   | Specific gravity (20/20℃)               | -         | max. 0.793            |  |
| 4   | Refractive index n20/d                  | -         | 1.327 ~ 1.330         |  |
| 5   | Solubility in water                     | -         | Within the limit      |  |
| 6   | Water                                   | %         | max. 0.1              |  |
| 7   | Residue on evaporation                  | ppm       | max. 5                |  |
| 8   | Acid (as HCOOH)                         | ppm       | max. 20               |  |
| 9   | Alkali (as NH3)                         | ppm       | max. 1                |  |
| 10  | Acetone and aldehyde                    | ppm       | max. 30               |  |
| 11  | Ethanol (C2H5OH)                        | -         | Within the limit      |  |
| 12  | Substances reducing permanganate (as O) | -         | Within the limit      |  |
| 13  | Substances darkened by H2SO4            | -         | Within the limit      |  |
| 14  | Silver (Ag)                             | ppb       | max. 5                |  |
| 15  | Aluminium (Al)                          | ppb       | max. 20               |  |
| 16  | Barium (Ba)                             | ppb       | max. 10               |  |
| 17  | Calcium (Ca)                            | ppb       | max. 30               |  |
| 18  | Cadmium (Cd)                            | ppb       | max. 2                |  |
| 19  | Cobalt (Co)                             | ppb       | max. 2                |  |
| 20  | Chromium (Cr)                           | ppb       | max. 5                |  |
| 21  | Copper (Cu)                             | ppb       | max. 10               |  |
| 22  | Iron (Fe)                               | ppb       | max. 20               |  |
| 23  | Potassium (K)                           | ppb       | max. 10               |  |
| 24  | Lithium (Li)                            | ppb       | max. 5                |  |
| 25  | Magnesium (Mg)                          | ppb       | max. 20               |  |
| 26  | Manganese (Mn)                          | ppb       | max. 2                |  |
| 27  | Sodium (Na)                             | ppb       | max. 50               |  |
| 28  | Nickel (Ni)                             | ppb       | max. 5                |  |
| 29  | Lead (Pb)                               | ppb       | max. 10               |  |
| 30  | Strontium (Sr)                          | ppb       | max. 2                |  |
| 31  | Zinc (Zn)                               | ppb       | max. 50               |  |
| 32  | Small particles (≥0.5μm)                | pieces/mL | max. 100              |  |
| 33  |                                         |           |                       |  |
| 34  |                                         |           |                       |  |
| 35  |                                         |           |                       |  |
| 36  |                                         |           |                       |  |
| 37  |                                         |           |                       |  |
| 38  |                                         |           |                       |  |
| 39  |                                         |           |                       |  |
| 40  |                                         |           |                       |  |

remark