

Certificate of Analysis

| Test | Specification | Result |
|---|---------------|-------------|
| Assay (CH ₃ OH) (by GC) | ≥ 99.9 % | 100.0 % |
| Color (APHA) | ≤ 10 | < 5 |
| Acidity (µeq/g) | ≤ 0.3 | < 0.3 |
| Alkalinity (µeq/g) | ≤ 0.1 | < 0.1 |
| Heavy Metals (as Pb) | ≤ 100.0 ppb | < 50.0 ppb |
| Residue after Evaporation | ≤ 5 ppm | < 1 ppm |
| Water (H ₂ O)(by Karl Fischer titrn) | ≤ 0.05 % | 0.01 % |
| Solubility in H ₂ O | Passes Test | Passes Test |
| Chloride (Cl) | ≤ 0.2 ppm | < 0.2 ppm |
| Phosphate (PO ₄) | ≤ 0.3 ppm | < 0.3 ppm |
| Sulfate (SO ₄) | ≤ 0.5 ppm | < 0.5 ppm |
| Trace Impurities – Aluminum (Al) | ≤ 50.0 ppb | < 5.0 ppb |
| Trace Impurities – Arsenic (As) | ≤ 5.0 ppb | < 2.0 ppb |
| Trace Impurities – Antimony (Sb) | ≤ 5.0 ppb | < 1.0 ppb |
| Trace Impurities – Barium (Ba) | ≤ 20.0 ppb | < 1.0 ppb |
| Trace Impurities – Boron (B) | ≤ 10.0 ppb | < 5.0 ppb |
| Trace Impurities – Cadmium (Cd) | ≤ 20.0 ppb | < 1.0 ppb |
| Trace Impurities – Calcium (Ca) | ≤ 50.0 ppb | 1.7 ppb |
| Trace Impurities – Chromium (Cr) | ≤ 20.0 ppb | < 1.0 ppb |
| Trace Impurities – Cobalt (Co) | ≤ 20 ppb | < 1 ppb |
| Trace Impurities – Copper (Cu) | ≤ 10.0 ppb | < 1.0 ppb |
| Trace Impurities – Gallium (Ga) | ≤ 50 ppb | < 1 ppb |
| Trace Impurities – Germanium (Ge) | ≤ 50.0 ppb | < 10.0 ppb |
| Trace Impurities – Gold (Au) | ≤ 20 ppb | < 5 ppb |
| Trace Impurities – Iron (Fe) | ≤ 50.0 ppb | 2.5 ppb |
| Trace Impurities – Lead (Pb) | ≤ 50 ppb | < 10 ppb |
| Trace Impurities – Lithium (Li) | ≤ 50.0 ppb | < 1.0 ppb |
| Trace Impurities – Magnesium (Mg) | ≤ 50.0 ppb | < 1.0 ppb |

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|-------------------------------------|---------------|-----------|
| Trace Impurities – Manganese (Mn) | ≤ 10.0 ppb | < 1.0 ppb |
| Trace Impurities – Molybdenum (Mo) | ≤ 300.0 ppb | < 5.0 ppb |
| Trace Impurities – Nickel (Ni) | ≤ 10.0 ppb | < 5.0 ppb |
| Trace Impurities – Potassium (K) | ≤ 50 ppb | < 10 ppb |
| Trace Impurities – Silicon (Si) | ≤ 50 ppb | < 10 ppb |
| Trace Impurities – Silver (Ag) | ≤ 20.0 ppb | < 1.0 ppb |
| Trace Impurities – Sodium (Na) | ≤ 50.0 ppb | < 5.0 ppb |
| Trace Impurities – Strontium (Sr) | ≤ 10.0 ppb | < 1.0 ppb |
| Trace Impurities – Tin (Sn) | ≤ 50 ppb | < 10 ppb |
| Trace Impurities – Titanium (Ti) | ≤ 20 ppb | < 1 ppb |
| Trace Impurities – Vanadium (V) | ≤ 300.0 ppb | < 1.0 ppb |
| Trace Impurities – Zinc (Zn) | ≤ 50 ppb | < 1 ppb |
| Trace Impurities – Zirconium (Zr) | ≤ 300.0 ppb | < 1.0 ppb |
| Particle Count – 0.5 µm and greater | ≤ 100 par/ml | 5 par/ml |
| Particle Count – 1.0 µm and greater | ≤ 8 par/ml | 2 par/ml |

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Methanol
CMOS



Material No.: 9073-05
Batch No.: 24B2661008

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|------|---------------|--------|
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For Microelectronic Use

Country of Origin: USA
Packaging Site: Paris Mfg Ctr & DC

Michelle Bales
Sr. Manager, Quality Assurance

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