

Methanol
VLSI



Material No.: 5370-05
Batch No.: 0000002198
Manufactured Date: 2012/05/14

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 | 0.2 |
| Alkalinity (µeq/g) | <= 0.1 | 0.1 |
| Residue after Evaporation | <= 5 ppm | < 1 |
| Water (H ₂ O)(by Karl Fischer titm) | <= 0.05 % | 0.01 |
| Solubility in H ₂ O | Passes Test | PT |
| Arsenic and Antimony (as As) | <= 10 ppb | < 10 |
| Chloride (Cl) | <= 0.2 ppm | 0.1 |
| Heavy Metals (as Pb) | <= 100 ppb | < 50 |
| Phosphate (PO ₄) | <= 0.3 ppm | < 0.3 |
| Trace Impurities –Aluminum (Al) | <= 50 ppb | < 5 |
| Trace Impurities –Barium (Ba) | <= 20 ppb | < 1 |
| Trace Impurities –Boron (B) | <= 10 ppb | < 5 |
| Trace Impurities –Cadmium (Cd) | <= 20 ppb | < 1 |
| Trace Impurities –Calcium (Ca) | <= 50 ppb | 2 |
| Trace Impurities –Chromium (Cr) | <= 20 ppb | < 1 |
| Trace Impurities –Cobalt (Co) | <= 20 ppb | < 1 |
| Trace Impurities –Copper (Cu) | <= 10 ppb | < 1 |
| Trace Impurities –Gallium (Ga) | <= 50 ppb | < 1 |
| Trace Impurities –Germanium (Ge) | <= 50 ppb | < 10 |
| Trace Impurities –Gold (Au) | <= 20 ppb | < 5 |
| Trace Impurities –Iron (Fe) | <= 50 ppb | 4 |
| Trace Impurities –Lead (Pb) | <= 50 ppb | < 10 |

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| Trace Impurities –Lithium (Li) | ≤ 50 ppb | < 1 |
| Trace Impurities –Magnesium (Mg) | ≤ 50 ppb | < 1 |
| Trace Impurities –Manganese (Mn) | ≤ 10 ppb | < 1 |
| Trace Impurities –Nickel (Ni) | ≤ 10 ppb | < 5 |
| Trace Impurities –Potassium (K) | ≤ 50 ppb | < 10 |
| Trace Impurities –Silicon (Si) | ≤ 50 ppb | < 10 |
| Trace Impurities –Silver (Ag) | ≤ 20 ppb | < 1 |
| Trace Impurities –Sodium (Na) | ≤ 50 ppb | < 5 |
| Trace Impurities –Strontium (Sr) | ≤ 10 ppb | < 1 |
| Trace Impurities –Tin (Sn) | ≤ 50 ppb | < 10 |
| Trace Impurities –Titanium (Ti) | ≤ 20 ppb | < 1 |
| Trace Impurities –Zinc (Zn) | ≤ 50 ppb | < 1 |
| Particle Count –0.5 μ m and greater | ≤ 50 par/ml | 5 |
| Particle Count –1.0 μ m and greater | ≤ 8 par/ml | 1 |

For Microelectronic Use

Reported value is the average of all samples counted for this lot number,with no individual sample value exceeding the specification.

Storage Conditions:

Country of Origin: US

Packaging Site: Paris Mfg Ctr & DC

ISO

Phillipsburg, NJ 9001.2008, 14001.2004
Paris, KY 9001.2008
Mexico city, Mexico 9001.2008
Deventer, The Netherlands 9001.2008, 14001.2004
Selangor, Malaysia 9001.2008
Panoli, India 9001.2008
Gliwice, Poland 9001.2008,17025.2005



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