

| Chemical Name | Common Name | Type | Authorized Equipment | Special Considerations |
|---------------------------------------|--|-------------------------------|--------------------------------------|-------------------------|
| A-174 Silane | Parylene Curing Agent | Adhesion Agent | Parylene Coater | |
| Acetic Acid | Acetic Acid | Acid | - | PPE Required |
| Acetone | Acetone | Solvent | - | Degrades nitrile gloves |
| Alumel | Alumel | Deposition Source | EBE | |
| Aluminum | Al | Deposition Source | EBE, DC Sputter | |
| Aluminum / Silicon / Copper | Al / Si / Cu | Deposition Source | Clustex | |
| Aluminum / Copper | Al / Cu | Deposition Source | Clustex | |
| Aluminum Etchant | Aluminum Etchant | Etchant | Light PPE | |
| Aluminum Nitride | Aluminum Nitride | Deposition Source | RF Sputter | |
| Aluminum Oxide | Aluminum Oxide, Al2O3 | Deposition Source | EBE, RF Sputter | |
| AR 600-546 | AR 600-547 | EBL Developer | - | |
| AR 600-71 | AR 600-72 | EBL Stripper | - | |
| AR-P 6200.09 | EBL Resist | EBL Resist | - | |
| AZ P4629 Photoresist | AZ P4629 Photoresist | Resist | - | |
| AZ 300 MIF | AZ 300 MIF | Developer | - | |
| AZ 400T Stripper | 400T | Stripper | - | |
| AZ 400K Developer | AZ 400K Developer | Developer | - | |
| AZ 5214 EIR | AZ 5214 EIR | Developer | - | |
| AZ 726 MIF | AZ 726 MIF | Developer | - | |
| AZ Developer 1:1 | AZ Developer 1:2 | Developer | - | |
| Buffered Oxide Etch 7:1 Mixture | BOE | Acid | - | PPE Required |
| Cerium Oxide | CeO2 | Deposit | EBE | |
| Chlorobenzene | Chlorobenzene | Solvent | - | |
| Chromium | Cr, Chrome | Deposition Source | EBE, DC Sputter | |
| Chromium Etchant | Chromium Etchant | Etchant | - | PPE Required |
| Chromium Oxide | Cr2O3 | Deposition Source | Clustex | |
| Cobalt | Co | Deposition Source | DC Sputter | |
| Copper | Cu | Deposition Source | EBE, DC Sputter | |
| Copper Etchant | Copper Etchant | Etchant | - | PPE Required |
| Copper Hydroxide | Cu(OH)2 | Powder | MTI Annealing | |
| Copper Oxide | Cu2O | Deposition Source | Clustex | |
| DPX-C | Parylene Dimer | Coating Agent | Parylene Coater | |
| Erbium | Er | Deposition Source | EBE, DC Sputter | |
| Ferritin | | Coating on SiO2/Si wafers | EBE | |
| Gallium Nitride | GaN | Deposition Source | EBE, RF Sputter | |
| Germanium | Ge | Deposition Source | EBE, RF Sputter | |
| Gold | Ag | Deposition Source | EBE | |
| Gold Etchant | Gold Etchant | Etchant | - | PPE Required |
| Graphite | C, Carbon | Substrate | PECVD, RIE | |
| Hafnium Nitride | HfN | Deposition Source | Clustex | |
| Hydrochloric Acid | HCl | Acid | - | PPE Required |
| Hydrofluoric Acid 49% | HF | Acid | - | PPE Required |
| Hydrogen Peroxide 30% | Peroxide | Peroxide | - | |
| Indium | In | Deposition Source | EBE | |
| Indium Antimonide | InSb | Deposition Source | RF Sputter | |
| Indium Oxide / Tin Oxide | IO / TO | Deposition Source | Clustex | |
| Indium Tin Oxide | ITO | Deposition Source | RF Sputter | |
| Iron | Fe | Deposition Source | EBE, DC Sputter | |
| IP-Visio Photoresist | | Nanoscribe resin | Nanoscribe | |
| IP-2 Photoresist | | Nanoscribe resin | Nanoscribe | |
| IP-Dip Photoresist | | Nanoscribe resin | Nanoscribe | |
| IP-L Photoresist | | Nanoscribe resin | Nanoscribe | |
| IP-S Photoresist | | Nanoscribe resin | Nanoscribe | |
| Iron(III) Oxide Etchant | Iron(III) Oxide Etchant | Etchant | - | |
| Isopropyl Alcohol | IPA | Solvent | - | |
| Lithium Niobate | LiNbO3 | Substrate | EBE, DC Sputter | |
| Lithium Tantalum Oxide | LiTaO3 | Deposition Source | RF Sputter | |
| Machinable Glass Ceramic | MACOR, Ceramic | Substrate | EBE, DC Sputter, RF Sputter | |
| Magnesium | Mg | Deposition Source | EBE | |
| Methanol | Methanol | Solvent | - | |
| MIBK:IPA 1:3 | EBL Developer | Developer | - | |
| Microposit MF-319 | Microposit MF-320 | Developer | - | |
| Molybdenum | Mo | Deposition Source | EBE, DC Sputter, Clustex | |
| Molybdenum Trioxide | MoO3 | Deposition Source | RF Sputter, Clustex | |
| Nickel Etchant | Nickel Etchant, Ferric Chloride | Etchant | - | PPE Required |
| Nickel Oxide | NiO | Deposition Source | Clustex | |
| Niobium | Nb | Deposition Source | DC Sputter | |
| Niobium Nitride | NbN | Deposition Source | Clustex | |
| Niobium Oxide | NbO | Deposition Source | Clustex | |
| Nitric Acid | Nitric Acid | Acid | - | PPE Required |
| NCM, Carbon Black, and PVDF film | NCM is composed of metal oxides; PVDF is an ethene, 1,1-difluoro-, homopolymer | Film on Al foil (not powders) | 4-pt probe | |
| Palladium | Pd | Deposition Source | DC Sputter | |
| Phosphoric Acid | Phosphoric Acid | Acid | - | PPE Required |
| Platinum | Pt | Deposition Source | EBE, DC Sputter | |
| Poly (methyl methacrylate) | PMMA | EBL Resist | - | |
| Polyethylene Terephthalate | PET | Substrate | RF Sputter | |
| Polystyrene | PS | Substrate | RF Sputter | |
| Potassium Hydroxide | KOH | Etchant | - | |
| Propylene Glycol Methyl Ether Acetate | PGMEA, NanoScribe Developer | Developer | - | |
| Polyvinylidene Difluoride | PVDF | Substrate | EBE, DC Sputter, RF Sputter | No substrate heating |
| Rhodium | Rh | Deposition Source | DC Sputter | |
| Ruthenium | Ru | Deposition Source | DC Sputter | |
| Ruthenium Oxide | RuO2 | Deposition Source | Clustex | |
| S1818 | S1819 | Photoresist | - | |
| Silicon | Si | Substrate, Deposition Source | EBE, DC Sputter, RF Sputter, Clustex | |
| Silicon Nitride | SiNx | Deposition Source | Clustex | |
| Silicon Dioxide | SiO2 | Deposition Source | EBE, RF Sputter | |
| Silicon Monoxide | SiO | Deposition Source | EBE | |
| Silver | Ag | Deposition Source | Clustex, EBE, DC Sputter | |
| SU-8 | SU-8 | Photoresist | - | |
| Sulfuric Acid | Sulfuric Acid | Acid | - | PPE Required |
| Sylgard 184 Silicone Elastomer | Sylgard 184 Silicone Elastomer | Transparent Encapsulant | - | |
| Sylgard Curing Agent | Sylgard Curing Agent | Transparent Encapsulant | - | |
| Tantalum | Ta | Deposition Source | EBE, DC Sputter | |
| Tantalum / Aluminum | Ta / Al | Deposition Source | Clustex | |
| Tantalum Carbide | TaC | Deposition Source | Clustex | |
| Tantalum Nitride | TaN | Deposition Source | RF Sputter | |
| Tantalum Oxide (Ta2O5) | Ta2O5 | Deposition Source | Clustex | |
| Tantalum Oxide (TaO1.8) | Ta1.8 | Deposition Source | Clustex | |
| Tantalum Oxide (TaO2) | TaO2 | Deposition Source | Clustex | |
| Tantalum Oxide (TaO2.2) | TaO2.2 | Deposition Source | Clustex | |
| Tantalum Silicide | TSi2 | Deposition Source | Clustex | |
| Tetramethylammonium Hydroxide | TMAH, TMAOH | Developer | - | PPE Required |
| Titanium | Ti | Deposition Source | EBE, DC Sputter | |
| Titanium Carbide | TiC | Deposition Source | Clustex | |
| Titanium Etchant | Ti Etch | Etchant | - | PPE Required |
| Titanium Nitride | TiN, Ti-Nitride | Deposition Source | RF Sputter | |
| Titanium Oxide | TiO, Ti-Oxide | Deposition Source | EBE, Clustex | |
| Trichloroethylene | TCE | Solvent | - | |
| Toluene | Toluene | Solvent | Bidtex, fume hoods | Ventilation Required |
| Tungsten | W | Deposition Source | DC Sputter | |
| Tungsten Oxide | W2O5 | Deposition Source | Clustex | |
| Turpentine Oil | Turpentine, Oil of Turpentine | Solvent | - | |
| Vanadium Oxide | VO | Deposition Source | Clustex | |

| | | | |
|-----------------|----------------|-------------------|------------|
| Xylene | Xylene | Solvent | - |
| Ytterbium | Yb | Deposition Source | EBE |
| ZDMAC | ZDMAC | EBL Stripper | - |
| ZED-N50 | ZED-N51 | EBL Developer | - |
| ZEP520 | ZEP521 | EBL Resist | - |
| Zinc Oxide | ZnO | Deposition Source | RF Sputter |
| Zirconium | Zr | Deposition Source | DC Sputter |
| Zirconium Oxide | Zirconia, ZrO2 | Deposition Source | Clustex |