

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
Acrylic sheet	Acrylic	Substrate	EBE	
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	
Ammonium Hydroxide	NH4OH	Cleaning agent	Fume hoods	
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	Depost	EBE	
Chlorobenzene	Chlorobenzene	Solvent		
Chloroform	Chloroform	Solvent	Laurel spinner in fume hood in Bay 1	
Chromel	Chromel	Deposition Source	EBE	
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	
DisChem DisCharge H2O	DisCharge H2O	Coating Agent	Spin coaters	
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	HN	Deposition Source	Clustex	
Hexamethyldisilazane	HMDS	Resist adhesion promoter	Mask aligners	
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-Q 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	-	
JRD1	JRD1	Coating agent	Spin coaters	
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	
Magnesium Fluoride	MgF2	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
Poly(acrylic acid)	PAA	Acidic cleaning agent	-	
Platinum	Pt	Deposition Source	EBE, DC Sputter	
Polydimethylsiloxane	PDMS	Solvent	-	
Polyether ether ketone	PEEK	Shadow mask	EBE	
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)	TaO5	Deposition Source	Clustex, EBE	
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	TiSi2	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	-	
(TRIDECAFLUORO-	Trichlor	Solvent	Fume hoods	
1,1,2,2TETRAHYDROOCTYL)TRICHLOROSILANE	Toluene	Solvent	Bittec, fume hoods	Ventilation Required
Tungsten	W	Deposition Source	DC Sputter	
Tungsten Oxide	WZOS	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	