

SMFL Chemistry SDS's

SMFL SDS Listing - Standard Chemistry

Below is a listing of standard chemistry found in the cleanroom.

Chemistry is listed by grouping

If you don't know the type - do a search on this page - by pushing Control F

[Researcher Chemistry SDS's can be found here](#)

Acids

Chemical/Trade Name	Main Hazard	Manufacturer	Rev	SDS Link
Acetic Acid	Combustible/Corrosive/Toxic	Sigma Aldrich	4/26/12	SDS
Hydrofluoric Acid	Toxic/Corrosive	Avantor	6/18/14	SDS
Hydrochloric Acid	Corrosive	Avantor	2/2/15	SDS
Phosphoric Acid	Corrosive	Avantor	6/24/15	SDS
Nitric Acid	Corrosive	Avantor	6/4/14	SDS
Sulfuric Acid	Corrosive	Avantor	2/2/15	SDS

Bases

Chemical/Trade Name	Main Hazard	Manufacturer	Rev	SDS Link
Ammonium Hydroxide	Corrosive	Avantor	3/4/15	SDS
Potassium Hydroxide	Corrosive	Avantor	6/5/14	SDS
Sodium Hydroxide	Corrosive	Ricca	5/4/15	SDS

Specialty Etchants

Chemical/Trade Name	Ingredient of Concern	Main Hazard	Manufacturer	Rev	SDS Link
Aluminum Etch 16-1-1-2	Phosphoric Acid	Corrosive	Fuji Film	9/29/14	SDS
Aluminum Etch Type D	Phosphoric Acid	Toxic	Transene	7/1/13	SDS
Buffered Oxide Etch 10: 1 (BOE)	Hydrofluoric Acid	Toxic	Avantor	11/13/14	SDS
Buffered Oxide Etch 10: 1 (BOE) w/ Surfactant	Hydrofluoric Acid	Toxic	Fuji Film	8/5/14	SDS
Buffered Oxide Etch 5: 1 (BOE) w/ Surfactant	Hydrofluoric Acid	Toxic	Transene	7/1/13	SDS
Chrome Etch 9048S	Perchloric Acid	Corrosive	Transene	5/1/19	SDS
Ferric Chloride	Hydrochloric Acid	Corrosive	MG Chemicals	8/16/13	SDS
Freckle Etch	Fluoroboric Acid	Corrosive	Fuji Film	9/25/17	SDS
Gold Etch TFA	Hydrochloric Acid	Corrosive/Toxic	Transene	4/1/13	SDS
Pad Etch	Ammonium Fluoride	Toxic	Fuji Film	10/4/18	SDS

Photoresists / Lithographic Chemicals

Chemical/Trade Name	Ingredient of Concern	Main Hazard	Manufacturer	Rev	SDS Link
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Hexamethyldisilazane	Hexamethyldisilazane	Combustible/Corrosive /Toxic	Avantor	6/8/14	SDS
LOR A Resists	Cyclopentanone	Combustible - Irritant	MicroChem	10/7/14	SDS
LOR B Resists	Cyclopentanone	Combustible - Irritant	MicroChem	4/19/12	SDS
MiR 701 Photoresist	Ethyl Lactate	Combustible - Irritant	AZ/Merck	8/13/15	SDS
nLOF 2020 Photoresist	PGMEA	nLOF 2020 Photoresist	AZ/Merck	4/17/15	SDS
Microposit S1805 Photoresist	PGMEA	Combustible - Irritant	Dow/ Rohm& Haas	7/22/15	SDS
Microposit S1813 Photoresist	PGMEA	Combustible - Irritant	Dow/ Rohm& Haas	7/22/15	SDS
Microposit S1827 Photoresist	PGMEA	Combustible - Irritant	Dow/ Rohm& Haas	2/25/15	SDS
MicroChem SU-8 2000 Photoresist	Gamma Butyrolactone	Combustible - Irritant	MicroChem	7/16/13	SDS
MicroChem SU-8 3000 Photoresist	Gamma Butyrolactone	Combustible - Irritant	MicroChem	7/16/13	SDS

Developers - Alkaline & Solvent

Chemical/Trade Name	Ingredient of Concern	Main Hazard	Manufacturer	Rev	SDS Link
CD-26 Developer	Tetramethyl Ammonium Hydroxide	Toxic	Dow/ Rohm& Haas	4/6/15	SDS
Microposit 351 Developer	Sodium Hydroxide	Corrosive	Dow/ Rohm& Haas	3/11/15	SDS
SU8 Developer	PGMEA	Combustible - Irritant	MicroChem	2/22/12	SDS

Solvents/Strippers

Chemical/Trade Name	Ingredient of Concern	Main Hazard	Manufacturer	Rev	SDS Link	Data Sheet
Acetone	Acetone	Flammable - Irritant	Avantor	6/17/14	SDS	
BTS-220	Propylene Glycol Methyl Ether Acetate	Flammable - Irritant	JT Baker	9/17/14	SDS	
Chloroform	Chloroform	Combustible / Toxic	JT Baker	6/12/14	SDS	
Ethanol	Ethanol	Flammable	Pharmco	5/8/14	SDS	
Isopropanol	Isopropanol	Flammable - Irritant	Avantor	6/23/14	SDS	
Methanol	Methanol	Flammable - Toxic	Avantor	4/2/15	SDS	
Nano Remover PG	N-Methyl Pyrrolidinone	Combustible - Irritant	Microchem	12/16/14	SDS	
NMP	N-Methyl Pyrrolidinone	Combustible - Irritant	BDH - VWR	3/23/15	SDS	
PRS2000	N-Methyl Pyrrolidinone	Combustible - Irritant	Avantor	6/8/14	SDS	Data Sheet for PRS 2000
RER 600	Propylene Glycol Methyl Ether Acetate	Flammable - Irritant	Fuji Film	2/4/19	SDS	
SU8 Thinner	Cyclopentanone	Flammable - Irritant	MicroChem	7/2/13	SDS	
Xylene	Xylene	Flammable - Irritant	Millipore	10/30/14	SDS	

Etch Gases

Chemical/Trade Name	Main Hazard	Manufacturer	Rev	SDS Link
Argon	Asphyxiant	Matheson/Air Gas	12/10/15	SDS
Boron Trichloride	Toxic/Corrosive	Matheson/Air Products	9/6/15	SDS

Chlorine	Toxic/Corrosive	Air Products	7/28/15	SDS
Difluoromethane R32 (CH ₂ F ₂)	Asphyxiant	Airgas	8/15/15	SDS
Hexafluoroethane R116 (C ₂ F ₆)	Asphyxiant	Airgas	4/16/13	SDS
Helium	Asphyxiant	Airgas	5/1/15	SDS
Nitrogen	Asphyxiant	Airgas	8/7/15	SDS
Oxygen	Oxidizer	Matheson	12/10/2015	SDS
Sulfur Hexafluoride	Asphyxiant	Air Products	9/6/15	SDS
Tetrafluoromethane (CF ₄)	Asphyxiant	Airgas	5/17/2015	SDS
Trifluoromethane (CHF ₃)	Asphyxiant	Airgas	10/20/14	SDS
Xenon Difluoride	Oxidizer	Air Products	1/21/15	SDS

Deposition / Implant Gases

Chemical/Trade Name	Main Hazard	Manufacturer	Rev	SDS Link
Ammonia	Inhalation Hazard	Air Products	9/6/15	SDS
Boron Trifluoride	Corrosive/Toxic	Air Liquide/Voltaix	9/22/15	SDS
Dichlorosilane	Pyrophoric/Toxic	Air Products	9/6/15	SDS
Fluorine (5%) Argon Balance	Corrosive/Toxic	Airgas	3/14/14	SDS
Helium / Oxygen	Asphyxiant	Airgas	10/15/14	SDS
Hydrogen	Flammable	Matheson	3/14/14	SDS
Methane	Flammable	Airgas	12/5/13	SDS
Nitrous Oxide	Oxidizer	Airgas	5/20/15	SDS
Octafluorocyclobutane (C ₄ F ₈)	Asphyxiant	Airgas	1/26/15	SDS
Octafluoropropane (C ₃ F ₈)	Asphyxiant	Matheson	6/13/12	SDS
Phosphine	Pyrophoric/Toxic	Air Liquide/Voltaix	11/6/15	SDS
Silane	Pyrophoric	Air Products	9/6/15	SDS

ALD Gases

Chemical/Trade Name	Main Hazard	Manufacturer	Rev	SDS Link
Trimethylaluminum	Flammable/Corrosive	Strem	4/25/14	SDS
Diethylzinc	Flammable/Corrosive	Strem	4/25/14	SDS
Tetrakis Titanium	Flammable/Corrosive	Strem	8/1/16	SDS

Other

Chemical/Trade Name	Main Hazard	Manufacturer	Rev	SDS in System	SDS Link
CA-40 Mask Cleaner	Irritant	Cyantek	11/5/03	x	MSDS
Glycerol	Irritant	Avantor	4/24/14		SDS
Hydrogen Peroxide	Oxidizer	Avantor	6/11/14		SDS
Parylene	Flammable	SCS	3/27/15		SDS
Tetraethyl Orthosilicate (TEOS)	Flammable	Air Products	1/8/16		SDS
Trans LC	Irritant	Schumacher	9/6/15		SDS

Metals / Deposition Materials

Chemical/Trade Name	Manufacturer	Rev	MSDS Link
Aluminum	Lesker		SDS
Aluminum Oxide	Lesker		SDS
Chromium	Lesker		SDS
Copper	Lesker		SDS
Gallium Oxide	Sigma Alrich	6/25/14	SDS
Gold	Lesker		SDS
Hafnium	Lesker		SDS
Hafnium Oxide	Lesker		SDS
Indium	Lesker		SDS
Indium Oxide	Lesker		SDS
Indium Tin Oxide	Lesker		SDS
Molybdenum	Lesker		SDS
Nickel	Lesker		SDS
Palladium	Lesker		SDS
Platinum	Lesker		SDS
Silicon	Lesker		SDS
Silicon Dioxide	Lesker		SDS
Silicon Nitride	Lesker		SDS
Tantalum	Lesker		SDS
Titanium	Lesker		SDS
Tungsten	Lesker		SDS
Zinc Oxide	Lesker		SDS

SMFL Materials

Chemical/Trade Name	Used In	Manufacturer	Rev	SDS Link
DPD Free Chlorine Reagent	Water Testing		3/4/14	SDS
Ethylene Glycol	Coolant	Sigma Aldrich	2/26/15	SDS
Fomblin 16/6 Vacuum Oil	Vacuum Pumps	Inland	9/19/14	SDS
Fomblin 25/6 Vacuum Oil	Vacuum Pumps	Inland	9/19/14	SDS
Leybonol LVO 400 Vacuum Oil	Vacuum Pumps	Oerlikon Leybold	5/10/09	SDS
Inland 45 Oil	Vacuum Pumps	Inland	1/1/15	SDS
Inland FF10 Flushing Fluid	Vacuum Pumps	Inland	6/1/15	SDS
Inland TP 500 Oil	Vacuum Pumps	Inland	1/1/10	MSDS
Inland TW Oil	Vacuum Pumps	Inland	6/1/15	SDS
Invoil 20 Oil	Vacuum Pumps	Inland	6/1/15	SDS
Invoil 704 Oil	Vacuum Pumps	Inland	7/1/15	SDS
Propylene Glycol	Coolant	Dow	4/21/15	SDS
Ice Block	Coolant	Hillside Chem	3/25/14	SDS
Novaclean - Floor & Lab	Lab Cleaning	Micronova	6/15/15	SDS