

SOLID MATERIALS	FLAMMABILITY	LOCATION	SAFETY	SAFETY MEASURES	COMMENTS AND TECHNIQUE LIMITATIONS
<b>WOOD PRODUCTS</b>					
Wood	NF	2,3	H	A,B,C possibly D,E	check toxicity of species, you may have to use extra safety equipment
Plywood	NF	2,3	NH	A,B,C	
MDF	NF	3	H	A,B,C	always wear a dust mask, most brands off gas formaldehyde
MDO	NF	2,3	NH	A,B,C	
Particle Board	NF	3	H	A,B,C	always wear a dust mask, most brands off gas formaldehyde
OSB	NF	3	NH	A,B,C	
Recycled lumber	NF	2,3	NH	A,B,C	pre-approved materials only
Card Board	NF	1,2,3	NH	A,B,C	safety equipment if machinery used
Hard board	NF	2,3	NH	A,B,C	
Core materials (Grid Core)	NF	1,2,3	NH	A,B,C	
Veneers	NF	1,2,3	NH	A,B,C	safety equipment if machinery used, usually hand cut
<b>METALS</b>					
Aluminum	NF	2,3	NH	A,C	thin material can be cut on model shop tools, thicker stock in wood shop only
Copper	NF	2,3	NH	A,C	thin material can be cut on model shop tools, thicker stock in wood shop only
Brass	NF	2,3	NH	A,C	thin material can be cut on model shop tools, thicker stock in wood shop only
Lead	NF	2	NH	E	can be hammered, hand cut <b>do not</b> melt, wash hands, dispose of properly
Steel or any ferrous metal	NF	2,3	NH	A,C	can be cut with hack-saw only, <b>no</b> grinding, <b>no</b> sanding on machines, <b>no</b> sparks
Sheet metal	NF	2,3	NH	A,C,E	can be cut with hack-saw only, <b>no</b> grinding, <b>no</b> sanding on machines, <b>no</b> sparks
Zinc	NF	2,3	NH	A,C	can be cut with hack-saw only, <b>no</b> grinding, <b>no</b> sanding on machines, <b>no</b> sparks
Tin	NF	2,3	NH	A,C	can be cut with hack-saw only, <b>no</b> grinding, <b>no</b> sanding on machines, <b>no</b> sparks
Gold leaf (water leaf)	NF	1	NH		Silver leaf is the same
Gold leaf, (Dutch leaf)	F	2,4	NH	E	Silver leaf is the same
Precious metals	NF	1,2	NH		must share with Lab Coordinator
<b>PLASTICS</b>					
Acrylics (Plexiglas)	NF	2,3	H	A,B,C	cut with proper blade and technique, may heat to bend but <b>no</b> melting, glue in spray booth only
Polycarbonates (Lexan)	NF	2,3	H	A,B,C	cut with proper blade and technique, may heat to bend but <b>no</b> melting, glue in spray booth only
Phenolic-resin	NF	2,3	H	A,B,C	cut with proper blade and technique, may heat to bend but <b>no</b> melting, glue in spray booth only
PVC	NF	2,3	H	A,B,C	cut with proper blade and technique, may heat to bend but <b>no</b> melting, glue in spray booth only
PVA	NF	2,3	H	A,B,C	cut with proper blade and technique, may heat to bend but <b>no</b> melting, glue in spray booth only
UHMW	NF	2,3	H	A,B,C	cut with proper blade and technique
Melamine based products	NF	2,3	NH	A,B,C	Formica brand products, special blade and technique for cutting on table saw
Polyethylene sheeting	NF	1,2,3	NH		plastic sheets in a roll
Sintra	NF	2,3	H	A,B,C	cut with proper blade and technique, glue in spray booth only
Corian	NF	2,3	NH	A,B,C	cut with proper blade and technique, glue in spray booth only
<b>MODELING MATERIALS</b>					
Plaster of Paris	NF	2	NH	E	dispose of properly
Clay	NF	1,2	NH		dispose of properly
Concrete	NF	2	NH	E	dispose of properly
Plasticine	NF	1,2	NH		dispose of properly
Modeling Paste	NF	1,2	NH		dispose of properly
Geltrait, dental molds	NF	1,2	NH	E	dispose of properly
Wax	NF	1,2	NH		<b>do not</b> use open flame to sculpt, dispose of properly
Silicon Rubber	NF	1,2	NH	E	dispose of properly
Latex Rubber (Hydrocal)	NF	1,2	NH	E	dispose of properly
Body Filler (Bondo)	NF	4	H	D, E	spray booth only
<b>FOAMS</b>					
Styrofoam	NF	2,3	H	B	hand cut only, <b>DO NOT USE A HOT WIRE!, DO NOT MELT!</b>
Bead board	NF	2,3	H	B	hand cut only, <b>DO NOT USE A HOT WIRE!, DO NOT MELT!</b>
Blue board	NF	2,3	H	B	hand cut only, <b>DO NOT USE A HOT WIRE!, DO NOT MELT!</b>
Polyurethane foam sheet	NF	2,3	H	B	hand cut only, <b>DO NOT USE A HOT WIRE!, DO NOT MELT!</b>
Gator board or foam core	NF	1,2,3	NH		<b>do not burn</b>
<b>OFF THE WALL STUFF</b>					
Rubber	NF	1,2	NH		hand cut only, no machinery
Graphite powder	NF	1,2,4	NH	E	very fine powder, used for drawing
Felt	NF	1,2	NH		hand cut only, no machinery
Leather	NF	1,2	NH		hand cut only, no machinery
Fiberglass sheet (Shoji)	NF	1,2	NH	A,B,E	hand cut only, no machinery
Rockite	NF	1,2	NH	B	very fine dust when sanded, recommend this done in model shop only
Glass	NF	2	NH	A	hand cut only, no machinery, no etching unless pre-approved
Stone	NF	2	NH	A	hand cut only, no machinery

LIQUID MATERIALS	FLAMMABILITY	LOCATION	SAFETY	SAFETY MEASURES	COMMENTS AND TECHNIQUE LIMITATIONS
<b>PAINTS</b>					
Water based paints	NF	1,2,4	NH		includes water color, casein, acrylic, house paints, alkyds, water based enamels, dispose of properly
Oil based paints	F	4	H	E	includes artist oil, encaustic, house paints, oil based enamels (mineral spirit to clean up), dispose of properly
Spray paints	F	4	H	D,E	dispose of properly
<b>SOLVENTS</b>					
Turpentine	F	4	H	D,E	store in flammable liquid cabinet only, see MSDS
Paint thinner	F	4	H	D,E	store in flammable liquid cabinet only, see MSDS
Kerosene	F	4	H	D,E	store in flammable liquid cabinet only, see MSDS
Toluene	F	4	H	D,E	found in common formulas as a solvent, store in flammable liquid cabinet only, see MSDS
Xylene	F	4	H	D,E	found in common formulas as a solvent, store in flammable liquid cabinet only, see MSDS
VM&P Naphtha	F	4	H	D,E	store in flammable liquid cabinet only, see MSDS
Denatured alcohol	F	4	H	D,E	store in flammable liquid cabinet only, see MSDS
Acetone	VF	4	H	D,E	for cleaning and releasing super glue, store in flammable liquid cabinet only, see MSDS
trisodiumphosphate "TSP"	NF	4	H	A,E	for degreasing, see MSDS
Mineral Spirits	F	4	H	D,E	store in flammable liquid cabinet only, see MSDS
Lacquer thinner	VF	4	VH	D,E	store in flammable liquid cabinet only, see MSDS
<b>FINISHES</b>					
Varnish, oil based	F	4	H	D,E	wipe on or brush on only, spray booth only, put used rags in oily rag can, dispose of properly, see MSDS
Varnish, water based	NF	2,4	NH	E	wipe on or brush on only, spray booth only, put used rags in oily rag can, dispose of properly, see MSDS
Oil finishes, e.g. Danish oil	F	4	H	D,E	wipe on or brush on only, spray booth only, put used rags in oily rag can, dispose of properly, see MSDS
Stains, oil based	F	4	NH	E	wipe on only, put used rags in oily rag can, dispose of properly, see MSDS
Stains, water based	NF	2,4	NH	E	wipe on only, put used rags in oily rag can, dispose of properly, see MSDS
Boiled Linseed oil	F	4	H	E	wipe on only, put used rags in oily rag can <b>rags can spontaneously combust</b> , dispose of properly, see MSDS
Natural oils	NF	2,4	NH	E	pure tung oil, pure linseed oil, mineral oil, put used rags in oily rag can, dispose of properly, see MSDS
Wax	NF	1,2,4	NH	E	put used rags in oily rag can, see MSDS
Shellac	F	2,4	NH	E	wipe or brush on only, no spraying, put used rags in oily rag can, dispose of properly, see MSDS
Dyes, water based	NF	1,2,4	NH	E	wipe or brush on only, no spraying, see MSDS
Dyes, alcohol based	F	2,4	NH	E	wipe or brush on only, no spraying, see MSDS
Dyes, oil based	F	4	NH	E	wipe or brush on only, no spraying, put used rags in oily rag can, dispose of properly, see MSDS
Stripper, dibasic esters "DBE"	NF	4	H	A,D,E	dispose of properly, see MSDS
Stripper, n-methyl-2-pyrrolidone"NMP"	NF	4	H	A,D,E	dispose of properly, see MSDS
Stripper, butyrolactone "BLO"	NF	4	H	A,D,E	dispose of properly, see MSDS
Pre stain conditioner	F	4	NH	E	put used rags in oily rag can, see MSDS
Lacquer, water based	NF	4	H	D,E	dispose of properly, see MSDS
Sanding sealers	F	4	NH	D,E	check can to see what kind, i.e. shellac, varnish, lacquer; take appropriate precautions, see MSDS
Chlorine bleach	NF	4	H	A,D,E	check with Lab Manager first, see MSDS
2-part wood bleach	NF	4	H	A,D,E	check with Lab Manager first, see MSDS
Patination processes	NF	4	H	A,D,E	check with Lab Manager first, see MSDS
Polishing materials	NF	2,4	NH	A,E	where used and how depends on material, dispose of properly, see MSDS
Pore filler, water and oil based	F	4	NH	D,E	dispose of properly, see MSDS
<b>GLUES</b>					
PVA glue, white or yellow	NF	1,2,3	NH		dispose of properly
Organic glues	NF	1,2,3	NH		includes, rice, wheat, fish, hide (traditional hot hide glue in shop only)
Rubber cement	NF	1,2,3	H		avoid prolonged exposure in unventilated rooms
Contact Cement, water based	NF	2,4	NH	E	read manufactures label, dispose of properly
Contact Cement, solvent based	F	4	H	A,D,E	read manufactures label, dispose of properly
Hot glue	F	1,2,3	NH		caution, do not leave hot gun unattended
2-part epoxy, 5-minute	NF	1,2,3	NH	E	small batches are ok for studios
2-part epoxy, slow-set	NF	2,3	NH	E	for prolonged exposure consider a respirator
Cyanoacrylates (super glues)	NF	1,2,3,4	NH	E	small batches are ok for studio work
Super glue accelerators	NF	4	H	D,E	super glue accelerators are used in spray booth only with respirator
Spray glues and spray mounts	F	4	H	A,D,E	includes 3M 77, 3M 90, photo mounts, etc.
2-part urea formaldehyde	NF	3,4	H	D,E	mix in booth only can be used in wood shop only
Polyurethane	NF	2,3,4	NH	E	dispose of properly
Resorcinol-resin	NF	3,4	H	D,E	mix in booth only can be used in wood shop only

**UNAUTHORIZED MATERIALS      FLAMMABILITY      SAFETY      COMMENTS AND RESTRICTIONS**

**SOLVENTS**

MEK	VF	VH	not approved
Methylene Chloride	NF	VH	known carcinogen, used in gluing plexiglass
Benzene	VF	VH	not approved
Hexane	VF	VH	not approved
Gasoline	VF	H	not approved
Acids	E	VH	<b>ANY</b> acid

**FINISHES**

Lacquer, Nitrocellulose	VF	H	no spraying high VOC materials allowed in facilities
Lacquer, pre catalyzed, CAB	VF	VH	no spraying high VOC materials allowed in facilities
Lacquer, Acrylic	VF	H	no spraying high VOC materials allowed in facilities
Lacquer, Urethane	F	H	no spraying high VOC materials allowed in facilities
Isocyanate	NF	VH	any finish or formula which contains this compound, carcinogen
Crosslinked finish, Aziridine	NF	VH	no spraying high VOC materials allowed in facilities
Vinyl	F	H	no spraying high VOC materials allowed in facilities
Crosslinked finish, Polyester	F	VH	no spraying high VOC materials allowed in facilities
Stripper with Methylene Chloride	NF	VH	very dangerous carcinogen
PEG (polyethylene glycol)	NF	H	not approved
Heavy duty pool bleaches	NF	VH	extremely caustic

**MOLDING MATERIALS**

Casting resin, 2-part	NF	VH	polyester or any other type that requires a catalyst or thermal reaction to set
Fiberglass resin	NF	VH	caution, this is a thermoplastic, heavy out gassing
Polyurethane foam for casting	NF	VH	caution, this is a thermoplastic, heavy out gassing
2-part polyurethane resins	NF	VH	caution, this is a thermoplastic, heavy out gassing

LEGEND:

COLOR CODE:

	NON-HAZARDOUS AT LOW EXPOSURE LEVELS
	MODERATE HAZARD AT LOW EXPOSURE LEVEL, TAKE PRECAUTIONS
	HIGH HAZARD AT LOW EXPOSURE LEVELS, PROTECTIVE EQUIPMENT MANDATORY
	NOT AUTHORIZED UNDER ANY CIRCUMSTANCES

SAFETY MEASURES:

A	EYE-PROTECTION
B	DUST MASK
C	EAR-PROTECTION
D	RESPIRATOR
E	GLOVES, SKIN-PROTECTION

FLAMMABILITY:

NF	NON-FLAMMABLE
F	FLAMMABLE
VF	VERY FLAMMABLE
E	EXPLOSIVE

LOCATION:

1	STUDIO
2	WOOD SHOP
3	MODEL SHOP
4	SPRAY BOOTH

SAFETY:

NH	NON-HAZARDOUS
H	HAZARDOUS
VH	VERY-HAZARDOUS

DISCLAIMER: THIS IS AN EVOLVING LIST, NOT ALL INCLUSIVE. AS THE SCHOOL LEARNS MORE ABOUT PRODUCTS, EITHER THEIR SAFETY OR HAZARD, THIS LIST MIGHT CHANGE. ALWAYS REFER TO MSDS WHEN CONSIDERING USING A CHEMICAL OR A COMPOUND.