

# Nelsonite

## Chemical Products, inc.

## WOOD STABILIZERS AND WOOD PRESERVATIVES

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### NELSONITE 15B02

This stabilizer is recommended for use on wood that is to be stained or filled. Because of its versatility, lightness of color and low cost, it is the most widely used of our products. It stabilizes and controls dimension, it controls and protects finishes, it reduces manufacturing costs and it gives your product a sales feature desired by your customers. The following will explain:

#### STABILIZATION & DIMENSIONAL CONTROL

1. Reduces shrinking of wood in dry areas which results in end splits and surface checks. This trouble arises during the fall and winter when heat is turned on in the factory, and at all times in such areas as West Texas, Arizona and New Mexico.
2. Reduces swelling of wood in humid areas which results in sticking, warping and splitting. This trouble arises during the spring and summer when heat is turned off and the windows opened in the factory and at all times in the coastal and large river valley areas.
3. Reduces end splits and surface checks in wet lumber, caused by drying too fast.
4. Reduces end splits, surface tears and spring back during bending operations.
5. Holds down wood grain during long periods of storage.
6. Effective on plywood and solid lumber alike.
7. Parts most affected by humidity changes:
  - a. Tops
  - b. Panels
  - c. Turnings
  - d. Chair seats
  - e. Doors
  - f. Drawer fronts

#### COLOR CONTROL IN FINISHING

1. Uniforms the penetration of stains, toners, and fillers, producing a more uniform color, even when heartwood and sapwood are mixed. Does not have to be sanded like glue size.
2. Keeps finish from becoming too dark on edge grain, such as top edges, turnings and chair seats.
3. Reduces shading costs because of color uniformity.
4. Seldom changes existing colors.
5. Guards the finish against breakdown due to constant exposure to water, as on table and bar tops.
6. Gives the finish a cleaner and deeper appearance.
7. Reduces sanding costs.
8. Oil base stains may be mixed with NELSONITE 15B02 to stain and Nelsonize in one operation, further reducing costs.

#### SALES FEATURES

1. Reduces returns and allowances.
2. Helps your product to sell itself and to bring you added business.
3. The sticker shown below is furnished without charge to show your customer you are giving him the best in Beauty and Stability.



### APPLICATION SUGGESTIONS

Since production layout and procedure differ, no pre-set Nelsonizing plan can be suggested that will work for all factories. However, the following examples of how many of our customers are using Nelsonite may be a help in installing the process in other plants. Our engineers are available without charge to assist you.

To give stabilization within the plant, and stabilization and color control for your customer, the following may be helpful:

1. **BENDING** - dip parts to be bent in NELSONITE for 3 minutes. While still wet, place in steam retort and proceed with bending operation in usual manner.
2. **CHAIR SEATS (solid)** - after seat blank is glued up, dip in or brush NELSONITE on for 3 minutes. While still wet, place in steam retort and proceed with bending operation in usual manner.
3. **DOORS (solid)** - after door blank is glued up, dip or brush NELSONITE on ends. After fully machined and before polish sanding, dip whole door in NELSONITE.
4. **DOORS (panelled)** - after panels are made, dip them in NELSONITE. Then assemble panel into stiles, machine, dip whole door and then polish sand.
5. **DOORS (plywood)** - after door has been assembled and fully machined, dip in NELSONITE and, after dry, polish sand.
6. **DRAWER FRONTS (solid)** - after fronts are fully machined, but before dovetailing, dip in NELSONITE. After it is dry, dovetail.
7. **DRAWER SIDES & BACKS** - after fully machined, but before dovetailing, dip in NELSONITE. After dry, dovetail.
8. **EMBOSSING** - dip the part for 3 minutes and allow to dry for at least one hour. Then place the parts in the press for heat-embossing. Although NELSONITE will work after it has cured, best results are achieved if the parts are embossed the same day as treated.
9. **END COATING** - can be done with a liberal application of NELSONITE by brush or by a wet spray at a pressure no higher than 10 to 15 pounds at the nozzle.
10. **GOLF CLUB HEADS - Persimmon** can be treated in either one of two methods. One is to dip the heads in NELSONITE for at least one hour as soon as they are received. Allow to dry at least two days before machining. This will not only protect the rough-cut heads while in storage, but allow sufficient penetration to permit all machining necessary without cutting through the protective coating. The second method is to dip the rough-cut heads for 30 seconds to reduce checking in storage. After full machining, again dip for 30 seconds and allow to dry at room temperature for at least 12 hours before assembly.  
  
*Laminated* rough-cut heads should be dipped for 30 seconds and allowed to dry for 12 hours at room temperature. After all machining and sanding, dip the heads again for 30 seconds and after a 12 hour drying period, assemble the face and heel plates and polish sand.
11. **MACHINING** - to reduce tears and chipping while machining (especially routing, turning and shaping), dip the parts in NELSONITE for at least 3 minutes and allow to drip-dry for 15 minutes. Machine before it has cured.
12. **PANELS (solid)** - after blank is glued up, dip or brush NELSONITE on ends. Machine, except

routing or grooving, and drum sand. Dip in NELSONITE and when dry, route, groove or tenon as desired for assembly.

13. **PANELS** (plywood) - after the panel has been glued up and machined, except for routing, grooving or tenoning, dip in NELSONITE. After dry, route, groove or tenon as desired and sand.
14. **TOPS (solid)** - see instructions for Doors (solid), #3.
15. **TOPS (plywood)** - see instructions for Doors (plywood), #5.
16. **TURNINGS** - dip or brush ends of blanks before turning. After turning, sand and dip whole turning in NELSONITE. After dry, chuck, route or mortise as desired.

For those whose stabilization problems within the plant are minor, but who want stabilization and color control for their customers, we suggest the following:

1. **BEDS, CHAIRS, AND OPEN ITEMS** - First machine and assemble all parts. Dip or wet spray with NELSONITE. When dry, clean and sand for finishing.
2. **CASE GOODS** - assemble drawers or doors and then Nelsonize before inserting or attaching to case. Assemble case and Nelsonize it before inserting drawers or attaching doors. After final assembly, clean, and sand for finish.

### APPLICATION INSTRUCTIONS

#### 1. GENERAL

- a. NELSONITE should be applied at room temperature, 60 to 85 degrees F. If received during cold weather, allow to warm up at room temperature for 48 hours before using. Wood to be treated should be not less than 60 degrees F.
  - b. Good ventilation around the Nelsonizing operation and in the drying area is essential to dissipate the solvent fumes.
  - c. Keep NELSONITE away from open flame. Flash point is 103 degrees F.
  - d. Dip tanks should be tightly covered when not in use to prevent unnecessary evaporation of solvents. Also, partially filled containers should be covered.
2. a. **BRUSH** - Apply liberally and evenly first to the end wood, then the surface and again to the end wood.
  - b. **DIP** - Immerse completely for 30 seconds or better and allow excess to drain. (Dipping is recommended for greatest stabilizing efficiency and economy).
  - c. **SPRAY** - Wet NELSONITE on at a nozzle pressure of not more than 10 to 15 pounds. Fogging it on at higher pressure will not apply enough material. A No.2 gun with an E nozzle is suggested.

#### 3. DRYING TIME

- a. **HANDLING** - Three to five minutes.
- b. **FINISHING** - 12 hours at room temperature or 30 to 40 minutes in an aerated oven at 125 degrees before regular finishing operations are started.
- c. **TESTING** - Normal laboratory procedure is to allow one week for curing before testing. **DO NOT TEST IN LESS THAN 72 HOURS AFTER TREATMENT.** Although NELSONITE dries in a matter of minutes for handling and overnight for further finishing operations, it takes the solids 72 hours to completely cure and set up to form the moisture barrier for which it is noted.