UNION CARBIDE AND CARBON CORPORATION

3 H

# VINYLITE The VERSATILE Clastic



# VINYLITE

The

## VERSATILE PLASTIC

In old fables and children's stories, gods could change their shape at will—appearing to men as wild beasts, dwarfs, giants, trees, birds, and reptile's. Recalling such tall tales, you smile. Yet today, science has discovered an amazing plastic material that is as versatile as the old gods in assuming new shapes and natures.

### All Things to All Men

This material is Vinylite\*—a fluffy powder that is colorless, odorless, tasteless, non-flammable, and chemically inactive. In one form, it may appear as a clear, transparent sheet. In another, as a brightly colored porcelain-like surface. In still another, as rich paint or enamel. Sometimes we find Vinylite used for floors and walls and moldings, replacing linoleum, plaster, and wood.

Again, we see it replacing metal for electrical and household appliances. Or we find it doing jobs that used to be done with rubber, stone, or other nat-

<sup>\*</sup> Trademark

ural materials. And as time goes on, we shall see even stranger uses for this almost magical substance—Vinylite.

### What Vinylite Is

Vinylite is a resinous material that can be formed, under heat and pressure, into almost any desired shape. It is a product of Carbide and Carbon Chemicals Corporation, which is a unit of Union Carbide and Carbon Corporation.

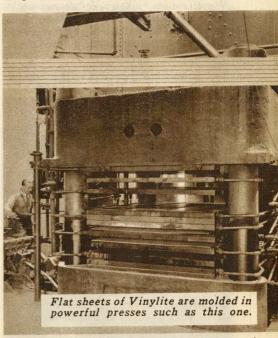


### **How Vinylite Is Shaped**

When, let us say, a red Vinylite cigarette box is to be produced, a red compound is made by mixing some of the fluffy powder with coloring materials and fillers. The red compound is placed in a mold shaped like the desired box. Then heat is applied to the powder, and the mold is closed under pressure. When cool, the mold is opened and a beautiful red box is removed.

### The Universal Material

Vinylite is adaptable to such a multitude of uses because it can be worked into practically any shape, can be made colored or colorless, transparent or translucent. It is not attacked by alcohol, gasoline, grease, oil, acids, or concentrated lye. It is strong and durable, yet extremely light. It does not burn; and it is a non-conductor of electricity. Water does not hurt it. In fact, any Viny-lite article can be cleaned with soap and water. It does not tarnish, crack, or chip, and never shrinks or warps out of shape. In short, it comes nearer to be-



ing the perfect all-purpose material than anything science has yet produced. That is why such widely different things as walls and babies' rattles, floors and vanity cases, bottle caps and radio cabinets, can be made from it with equal facility.

### **Hundreds of Uses**

Vinylite, which possesses such a diversity of useful characteristics, naturally has many other applications. From Vinylite rods, tubes, and sheets, which are made from the powdered resin, thousands of useful articles can be formed for personal use, home use, or industrial use.



Only a partial list of these would include: panels for walls, floor tiles, and wainscoting; Vinylite doors and door knobs; Vinylite trays, cups, saucers, tumblers, wine glasses, and clocks.

### **Phonograph Records**

Long-playing, flexible phonograph records are made of Vinylite, both because it is nearly unbreakable and because it does not shrink or warp under varying weather conditions. This latter is important because shrinkage or warpage would disturb the delicate sound track and distort the tone.





Another common use for Vinylite is in dental plates to which artificial teeth are attached. For these, it is the ideal material, because it is odorless, strong, light, pleasing in color, and immune to mouth-acids and moisture.

### For Cleanliness

One of the most valuable services that Vinylite performs is as a protective agent in food and cosmetics containers. Vinylite can be made into chem-

ically inert jars or tubes that will neither affect nor be affected by their contents. Paper coated with Vinylite resin is widely used for sealing such containers to make them airtight and moisture-proof.

Likewise, in the bathroom of your home, Vinylite shows itself in many of its forms. The caps on the toothpaste and shaving-cream tubes may be made of Vinylite, as well as the towel racks, the hand-rails on the shower, and the toothbrush handles.

### **Odorless and Non-Flammable**

Certain personal possessions have always been made of plastics. But since some plastics have an unpleasant odor, such things as automatic pencils, combs and brushes, women's dress buckles, and vanity cases—and such household items as calendars, cigarette boxes, and cosmetic jars—are much more attractive when made of Vinylite, because Vinylite is odorless. In addition, Vinylite is non-flammable. If a hot curling-iron should accidently touch a Vinylite comb, it would not catch fire.

### **Does Not Shrink**

Radio dials, rulers, and other measuring instruments are made of Vinylite because Vinylite does not shrink. Needless to say, if they were made of shrinkable materials, they would be useless because the graduations on them would become inaccurate.

### Shoes

Vinylite resins are now being used by shoe manufacturers to form box toes. These are made from textile felt stiffened with Vinylite. The result is a toe that holds its shape, is impervious to moisture, and does not stain the foot or stocking.

### Corrosion-Resisting

In chemical plants, metal pipes are lined inside or out with Vinylite tubing to protect them from rust or corrosion.



The chemicals that soon destroy metal do not injure Vinylite.

Likewise, thousands of Eveready flashlights protected with a Vinylite covering are used by industrial concerns, because Vinylite is resistant to water, all alkalis, alcohols, petroleum hydrocarbons, and common acids or fumes that would eat away the exposed metal parts of ordinary flashlights. Also, because Vinylite has good insulating qualities, these flashlights are recommended for use in electrical fields.

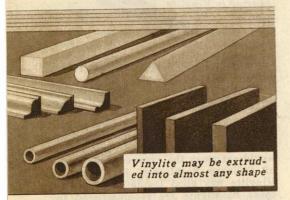
### Rods, Tubes, Sheets

Vinylite can be supplied as rods, tubes, or sheets, which can be easily

molded or shaped into almost any desired form with application of heat. Because Vinylite is thermoplastic, its chemical composition does not change when heat is applied. Consequently, the same piece can be molded and remolded any number of times. In operations where there is considerable "flash" or waste material, this feature is a real money-saver. The "flash" can be remolded along with fresh material, thus reducing waste to a minimum.

### **Vinyloid Lacquers**

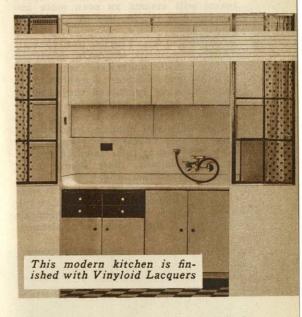
Vinyloid\* lacquers, which are made



from Vinylite resin, can be produced in all colors and pastel shades. They form excellent protective surfaces for materials that are exposed to the attack of acids and alkalis because they are not affected by these destructive agents. For surfacing refrigerators, kitchen tables, cabinets, and other fixtures and household appliances that need a rich smooth finish resembling porcelain or enamel, Vinyloid lacquers have many advantages. They can be washed easily and safely with soap and water; they do not stain or chip; and they can be applied to compositions that cannot be treated successfully with any other kind of lacquer.

### The Future

In this outline of Vinylite's applica-



tions in personal, household, and industrial products, you have undoubtedly sensed that there are hundreds of other articles that ought to be made of this modern plastic. This is indeed true; and in a few years, Vinylite will be used for things undreamed of today. Carbide and Carbon Chemicals Corporation engineers are constantly improving Vinylite's properties and finding new applications for it. Scientists tell us that though today is the Age of Alloys, tomorrow will be the Age of Plastics. If their prediction comes true. Vinylite resins will assume an even more important role in the life of every one of us.

When you see Vinylite for yourself and appreciate its wonderful possibilities, you will understand why Union Carbide and Carbon Corporation is proud to have sponsored the development and practical application of Vinvlite. Manufacturers who are using Vinylite find that this modern thermoplastic gives their products a new appeal and lends real aid to their sales efforts. If. in your business, there seems to be some product that might wear better, look better, or perform better if it were made of Vinylite, do not hesitate to call upon Carbide and Carbon Chemicals Corporation for advice and assistance. Technical information on Vinylite, and assistance on the uses of this new material can be obtained by addressing any office of Carbide and Carbon Chemicals Corporation or by writing to

UNION CARBIDE AND CARBON CORPORATION 30 East 42nd Street New York, N. Y.

### Read These Books

If you have found this b esting, you will undoubtedl others in this series:

- A UCC Products for Oxy-Acetyler Cutting
- B UCC Products for Oxygen Ther
- C UCC Lighting Carbon Products
- D UCC Industrial Carbon Products
- E UCC Pyrofax Gas
- F UCC Synthetic Organic Chemica
- G UCC Vinvlite-The Thermoplasti
- H UCC Products for Alloy Steels ar
- I UCC Carbon and Graphite Electro
- J UCC Haynes Stellite Products
- K UCC Eveready Flashlights and B
- L UCC Eveready Prestone
- M UCC Eveready Layerbilt "B" Bat
- N UCC Condensed List of Technical
- O -UCC Condensed List of Products a
  Subsidiary Companies
  P -UCC Story of Air and Linde Liqui
- onstrations
  O UCC Story of the Electric Furnace

Ask for these booklets at th Carbide and Carbon Corporation at A Century of Progress, or w them to:

UNION CARBIDE AN CARBON CORPORATI

30 East 42nd Street, New York,

