



## About LACWARE TOYS

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### A. What are lacware products?

Lacware is a traditional handicraft from Karnataka, India. It is practiced by artisans in Channapatna, a small town located 60 kms from Bangalore city. With the onslaught of plastic and other synthetic materials, this ecologically friendly craft has seen a steady decline. Lacware refers to wooden articles that are turned on the lathe and finished with **lac**\*. The entire process from shaping the wood to lac application is completed on the lathe itself and hence the products are a combination of circularly symmetric shapes.

#### **a. Raw material :**

The lacware products are mostly crafted out of Hale wood (*Wrightia Tinctoria*). Hale wood is close grained, moderately hard and is best suited for turning and lac application. The wood does not require any chemical treatment. It is seasoned and used directly. The wood is shaped by turning it on a lathe. Initially there were only manually-operated lathes but now power lathes have been introduced.

#### **FAQs: Doesn't using of wood lead to depletion of forests?**

Hale (*Wrightia Tinctoria*) is a local species of tree that grows widely in the whole of southern India. It is found on village wastelands and in the forests in several parts of Karnataka. The wood used by the artisans comes from non-forest land and private-lands in and around Channapatna. Usually the entire tree is not felled and the tree grows back.

Lacware is a handicraft industry. According to estimates, Channapatna has about 2500 lacware artisans and the wood requirement does not exceed 250 cubic meters per month. This is almost negligible in comparison to the raw material requirements of other wood based industries such as the paper mills and the plywood / solid wood industries. Being a close grained soft wood Hale wood is most suitable for turning and lac application and is only used by the lacware handicraft industry. It is not commercially exploited by other wood industries due to its low structural strength.

However to ensure regular availability of raw material MAYA ORGANIC plans to work with the forest department and with local village communities to grow Hale tree in non-forest and private wasteland. Further MAYA ORGANIC is also exploring the use of other non forest woods such as bamboo, rubber wood and plantation pine wood.

\* Lac – a natural resin secreted by microscopic tiny insects on tree bark



### **b. Shaping the wood:**

Though hand lathes are still used by some artisans in villages, most of the artisans have taken to power lathes. Only small and simple beads are made on the hand lathe. In a power lathe the wood is turned using the electric motor, but the chisel work, and the final shaping/detailing is done by the artisan using hand held tools. Once the required shape is obtained the wood is sanded to a smooth finish.

### **c. Finishing & colouring:**

The beautiful shiny finish of these articles is obtained by using lac. Lac / shellac is a natural resin. Both synthetic and natural pigments can be used to colour the lac. **MO Toys are manufactured using Natural dyes.** Application of lac is done after completing the sanding process. A coloured lac stick is pressed against the wood while it is turning on the lathe. Lac melts due to the frictional heat and sticks to the wood. This is then evenly spread and polished to a shiny gloss finish by using a screw pine (Talegari) leaf. The entire process is carried out on the lathe itself and hence these products are also referred to as *Lac-turnery*.

### **d. About Natural Dyes**

Natural Dyes are colours extracted from naturally available sources. The source of these dyes can be plants/ trees, animals or minerals. The following dyes are used for colouring MO Toys.

#### **Yellow: Turmeric powder**

Turmeric plant is native to Southern Asia and is extensively cultivated all over India. The root of the plant is dried and powdered to obtain turmeric powder. Turmeric powder is widely used in Indian cooking and is well known for its medicinal and herbal properties.

#### **Bluish Black / Bluish Green: Indigo powder**

Indigo is about a 2-3 feet long plant, cultivated on thousands of acres of land across India. The whole plant is used for extraction of dye. The extract form of dye is supplied in powder form. Indigo is a time honoured dye and was used since ancient times in the Indian subcontinent. Lac mixed with indigo powder when applied on wood gives a bluish black / bluish green colour.

#### **Orange : Kanchi Kum Kum powder**

Natural kum kum powder, considered sacred in India, is traditionally made by mixing turmeric powder with lime (calcium hydroxide) which turns the yellow turmeric powder into red colour. The name 'Kanchi Kum Kum' derives its roots from Kanchi, a famous temple town in southern India, where they continue to produce this Kum Kum in the traditional method using natural ingredients. Kum Kum is mixed with Lac and applied on wood to get a bright orange colour.

#### **Red: Manjishta (Natural Alizarin) + Kanchi Kum Kum**

Manjishta, also known as Indian Madder, is a creeper that is cultivated in the foot hills of the Himalayas in huge quantities. The red coloured roots of this plant are dried and powdered to get the dye stuff Alizarin. This powder is mixed with Kanchi kum kum to get the desired red colour.

#### **Green : Indigo + Turmeric**

#### **Light Brown: Catechu ( Katha)**

Catechu is purified extract of wood *Accacia catechu*. The plant of *Accacia catechu* is about 15 meter high. This dye is mixed with lac and applied on wood to get light to medium brown colours.

#### **Dark Brown: Ratanjot**

This dye stuff is made from the bark of Ratanjot tree (*Jatropha*). Lac mixed with this dye gives a dark brown colour when applied on wood.



#### **e. Lac or Lacquer ?**

Very often the Indian Lacware is mistakenly referred to as Indian lacquerware. Lac and Lacquer are different types of natural resins, but are often interchangeably used due to similarity of the finish. Though similar in looks to the Japanese lacquerware, Indian lacware is an entirely different product.

**\*Lac (Shellac)** is a natural resin secreted by a microscopic tiny insect, popularly known as Laccifer Lacca. Lac or scale insects live on particular variety of trees that grow in India. The secretion which forms a thin crust on the bark of the tree is scraped off and processed to obtain lac / shellac. Lac is an organic non-toxic finish and can be used in food as well as non-food products. It has a tenacious adhesive quality sticking to anything from porous wood to glossy smooth surfaces. Shellac has been used in a variety of ways for several thousands of years in India.

Lac is a solid substance with a low melting point and can be used as a surface finish by frictional application. It can also be dissolved in spirit and can be sprayed or brushed. Products made using lac are referred to as ***lacware products***.

**Lacquer** is the sap of the urushi (or lacquer) tree. Natural lacquer is tapped from the lacquer tree (like rubber is tapped from the rubber tree ) which is native to China, Korea, Japan, and the eastern Himalayas region. When exposed to moisture and air it polymerises and becomes a very hard, durable, plastic like substance. Lacquer is brushed as a surface finish on articles. Such products are usually referred to as ***lacquerware products***.

#### **f. Eco-Friendly Craft**

Lacware craft is an ecologically friendly manufacturing process.

1. Hale wood is the main raw material used by the lacware industry. It is not treated chemically. It is seasoned and directly used for making the products.
2. Optimum utilisation of wood - all sections of the wood are used by the artisans as the product range involves many small parts for completion.
3. This is a perfectly safe wood that has been used by artisans traditionally and there is no evidence of any occupational health hazards (respiratory ailments, dust allergy etc) arising due to the usage of the wood.
4. Lac which is used as a finishing material is a natural resin and is a time tested non toxic natural material that has been used in India for thousands of years.
5. Lac application (colouring & finishing) is a friction based process where lac, in its solid form is used. Since there are no liquids used, this process remains completely free of volatile contents and the associated respiratory hazards.
6. Maya Organic only uses natural dyes that are blended with lac for colouring the products.
7. Any wood waste generated (wood chips, wood dust etc) is used as raw material for the incense stick industry in Channapatna and surrounding areas.



## B. MO Toys and Safety Standards

Safety of a child is of paramount importance to us. Wooden toys from Maya Organic are made with particular attention to quality and safety. With the active support of our clients and distributors the products are being continuously refined for better quality and safety.

*Natural and Non Toxic materials* : The main wood used in the manufacture of Lacware toys is free of any chemical treatment. The toys are finished with Lac which is a natural resin and natural dyes are used for colouring. The colours and the lac are herbal in nature and are non toxic.

*Safe for usage*: The toys are physically and mechanically tested for safety and durability. All the loose parts of toys meant for children less than three years of age are inspected using the *the small parts cylinder* to ensure that they do not pose a choking hazard. Simple pull and push testing is done on all the glued and assembled parts manually to ensure that no small parts are left loose. Products are manually checked for smooth edges and surface finish to ensure that there are no sharp and jagged edges that can cause injury.

*Safety Compliance*: MO toys are tested in certified laboratories and are in compliance with international toy safety requirements such as the EN 71 standards for Europe and the ASTM standards for USA.

All the packaging boxes carry the necessary product information and labeling requirements such as recommended age, warnings if any etc. The products are packed under right humidity conditions to protect them from moisture and possible fungal attack.

## C. Taking care of MO toys

MO toys are handcrafted wooden toys that are designed and manufactured to ensure a high level of quality and safety. **Lac**, a natural resin, is used as a surface finish and non toxic **Natural dyes** are used for colouring.

Lac is a durable surface finish that can be polished to give an attractive shiny look. With proper care and handling, lacware toys can have a long life. The following is some information on the care and handling of lacware products

### **Protect from impact / sharp blows:**

Lac is a brittle material that is applied as a thin surface coating on toys. Sharp blows and impact against hard surfaces can result in the lac chipping off from the surface.

### **Protect from Alcohol / spirits:**

Lac dissolves in spirit. Contact with spirit/ alcohol can damage the lac coating and the bright shine may be lost.

### **Protect from adverse temperature changes:**

Lacware toys are indoor toys and should be protected from very hot / cold temperatures and weather conditions. Direct exposure to sun light for long periods can result in the fading of the bright colours.

**Protect from Water/moisture:**

Contact with water or prolonged exposure to moisture can result in the absorption of moisture by the wood through uncoated surface. The resulting expansion and contraction of wood can lead to the peeling off of the lac coating.

**Cleaning MO Toys**

Lacware toys should be cleaned with a dry cloth. When required the toys can be wiped with a moist cloth and should immediately be dried with a dry towel.

**Storage of MO Toys**

MO toys should be stored under room temperature conditions (15° to 25° C ) and under 60% Relative Humidity.

**MO TOYS** are manufactured by the MAYA ORGANIC artisan collectives from Channapatna of rural Karnataka, India. These hand crafted wooden toys are designed and manufactured to ensure a high level of quality and safety.

**MAYA ORGANIC** is a livelihood initiative which helps workers and artisans to collectively build enterprises that can produce high quality products and services. Buying MAYA ORGANIC products helps to promote independence and self-reliance among informal sector workers, to improve their skills, and to ensure education for their children. The MAYA ORGANIC enterprises do not employ child labour.

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