

OCTOPUS



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## **Kirei Distributed by Octopus**

### **APPLICATIONS / USES**

Kirei Board: A beautiful natural material made with renewable, non-toxic components.

Strong, lightweight and environmentally friendly, Kirei Board is an easily worked engineered panel product useable in nearly any architectural application.

- Architectural millwork
- Cabinetry
- Furniture
- Interior design
- Retail displays
- Hotel / Restaurant
- Wall covering
- Flooring
- Finished products

### **WHAT IS KIREI BOARD**

Kirei Board is constructed from the stalks of the Sorghum plant, grown around the world for food. These stalks are heat-pressed using a non-toxic adhesive to form the lightweight, strong, unique Kirei Board.

Kirei Board is manufactured using KR Bond, a water-based polymer-isocyanate adhesive. Formaldehyde-free KR Bond does not contribute harmful Volatile Organic Compounds (VOC's) to the indoor atmosphere.

Testing according to Japanese Government Standards JIS A6922-2003 resulted in 0.0 mg/L formaldehyde emissions.

## SPECIFICATIONS

### **Material Specifications**

Kirei Board is a composite panel board manufactured from reclaimed stalks of the sorghum plant, poplar wood bonding layers and KR Bond, an adhesive that emits no formaldehyde. Strong, lightweight and environmentally friendly, Kirei Board has been in use for wall covering, cabinetry, furniture, flooring and other decorative and finished products since 1995.

### **Ordering information**

Item #	Thickness	Dimensions	Sheet Weight
KB 3610	10mm	36"x72"	19.4 lbs.
KB 3620	20mm	36"x72"	35.1 lbs.
KB 3630	30mm	36"x72"	43.2 lbs.

Physical Properties		
Modulus of Rupture	1800mm	900mm
Modulus of Elasticity	1800mm	900mm
Internal Bond	1.5 kg/cm <sup>2</sup>	
Screw Holding Power	Face 25 Kg	Edge 10 Kg
Flame Spreading	3.025 inch/second (UL-HBF)	

## **WORKING WITH KIREI BOARD**

### ***Finishing Information***

Kirei Board is worked using standard fabricating techniques applicable for wood-based products.

#### **Cutting:**

Prefinishing material with a sealer coat can help avoid chipping along saw cuts. For best results use a high-quality saw blade, feeding the material at a uniform speed through the saw. Solidly back panels to prevent chipping along kerf on the saw tooth exit side.

#### **Drilling:**

A high-speed drill is recommended. To avoid chipout or breakage on the exit side, back the panel with scrap material.

#### **Routing:**

A speed of 20,000 RPM is recommended using double-fluted router bits.

#### **Filling:**

Standard wood putty can be used to fill any chips or holes caused by cutting and sanding. Select a color that best matches the color of Kirei Board or your finish color.

#### **Fastening:**

All fastening methods may be used, including nail, staples, rivets, screws, bolts, glue or combination. Type A or AB, sheet metal, twin fast types and fully threaded screws designed for use in particle board offer better withdrawal resistance than wood screws. Pre-drilled pilot holes are recommended for the size screw used. If nailing, use spiral or ring shank nails for extra holding power.

(Note: Nailing or screwing into edge grain may result in lower screw holding power due to fewer cross-layers being engaged.)

#### **Finishing:**

Kirei Board panels can be filled, sealed, painted, stained or varnished with most commercial finishing materials including short and medium oil length primers, fillers, lacquers, and synthetic base coats and topcoats and high temperature bake and acrylic and epoxy systems. The panels should be at stable room temperature (70 degrees F and higher) when coated. Kirei recommends Low-VOC emission finishes.

#### **Edge Treatment:**

The exposed edges of Kirei Board are intended to be finished, unless the type of application does not require a more finished appearance than sanding affords. If shaped exposed edges are required, filling, sanding and painting of the edge will provide a satisfactory finish. Kirei Board can be edge banded with most commercial edge treatments using standard adhesives

For assistance please call Octopus Products Limited at 1-877-OCTOLAM (628-6526)

# Kirei Board Materials Safety Data Sheet

## SECTION 1 - PRODUCT IDENTIFICATION

Trade Name as labelled: Kirei Board  
Synonyms: Koryo Board  
Manufacturer Name: Kirei USA  
Address: 640 10<sup>th</sup> Ave.  
**San Diego, CA  
92101**  
Business Phone: 619-236-9924  
Emergency Phone:  
Date of Preparation: 4/27/03  
Date of Revision: 4/27/03

Supplier Name: Octopus  
Products  
Limited  
Address: 23 Gurney Cr.  
**Toronto, ON  
M6B 1S9**  
Business Phone: 416-531-5051

## SECTION 2 - COMPOSITION

*Ingredients:*  
Sorghum Straw  
KR Bond adhesive

## SECTION 3 - PHYSICAL DATA

Physical State: Solid  
Density Range: .5  
Odour and appearance: Pale golden colour, no distinctive odour  
Odour threshold: Not applicable  
pH: Not applicable  
Vapour pressure (mm Hg): Not applicable  
Vapour density (air = 1): Not applicable  
Evaporation rate (water = 1): Not applicable  
% Volatile by volume: Not applicable  
Solubility in water: Not soluble – moisture resistant  
Boiling point (OC): Not applicable  
Freezing point (OC): Not applicable  
Coefficient of oil/water distribution: Not applicable

#### **SECTION 4 - FIRE AND EXPLOSION DATA**

Auto ignition temperature:	Auto Ignition point for Kirei Board exceeds 200 degrees Fahrenheit
Flammability classification:	Class "C"
Conditions of flammability:	Open flame
Special fire fighting procedures:	Cool boards in vicinity of fire with water spray. Fire fighters should be equipped with full protective gear, including self-contained breathing apparatus.
Means of extinction:	Water, foam, carbon dioxide, dry chemical.
Sensitivity to mechanical impact:	Not applicable
Sensitivity to static discharge:	Not applicable

#### **SECTION 5 - REACTIVITY DATA**

Is the product stable?	Stable
Conditions of reactivity	Hazardous polymerization will not occur
Incompatible substances:	None known

#### **SECTION 6 - TOXICOLOGICAL PROPERTIES**

WHMIS CLASSIFICATION:	Not a controlled product.
Primary routes of exposure:	Sawing or sanding may produce sawdust particles which may irritate skin and eyes on contact and if inhaled.
Acute effects of exposure:	Saw dust may cause mild irritation and redness to eyes.
Inhalation:	Saw dust may cause mild irritation of the respiratory tract.
Chronic effects:	None anticipated
Sensitizer:	None anticipated

#### **SECTION 7 - PREVENTION MEASURES**

Gloves:	May be used to protect the hands in material handling situations.
Respirator:	Particulate mask recommended where necessary to protect against breathing sawdust.
Eye protection:	Safety glasses should be used when sawing or sanding.
Footwear:	No special requirements.
Clothing:	To prevent skin contact.
Engineering controls:	Avoid generating sawdust where possible.
Leak and spill procedures:	Sawdust should be gathered up without generating dust clouds and contained for disposal.
Waste disposal:	Incinerate or landfill in accordance to municipal, provincial, state, and federal regulations.
Handling and storage:	No special storage requirements.
Special shipping information:	Not controlled under T.D.G.

#### **SECTION 8 - FIRST AID MEASURES**

Skin contact:	If sawdust irritates the skin, wash thoroughly with soap and water. Remove clothing and launder before re-use.
Eye contact:	Flush eyes and under eyelids with plenty of cool water until dust particles are flushed away. Consult physician if irritation persists.

Inhalation: Move to fresh air.

**SECTION 9 - PREPARATION DATA**

THE INFORMATION HEREIN IS BASED ON THE VENDOR'S MSDS, CCOSH, AND CCINFO WITH ADDITIONS AS NECESSARY TO COMPLY WITH CURRENT REGULATIONS. THE INFORMATION IS BELIEVED TO BE ACCURATE AT THE TIME OF PREPARATION. HOWEVER, KIREI USA. MAKES NO WARRANTY, EITHER EXPRESSED OR IMPLIED CONCERNING THE ACCURACY OR COMPLETENESS OF THE INFORMATION.