



Section 1 – Product and Company Identification

Manufacturer's name and technical support info:

Tagawa Sangyo Co., Ltd.
1924 Yugeta, Tagawa City, Fukuoka Pref.,
826-0041 Japan
T: +81-905-285-0855 | F: +81-947-44-8484
info@shikkui.com | http://www.shikkui.com

Product line name: Shikkui Surface Coatings

Product names: Shikkui Shirokabe

Product use: natural lime plaster for walls and ceiling

Section 2 – Component Mixture

Component name	Formula	CAS #	RTECS #
Calcium Hydroxide *	Ca(OH) ₂	1305-62-0	EW2800000
Calcium Carbonate *	CaCO ₃	471-34-1	FF9335000
Seaweed Extracts	-	-	-
Jute Fiber	-	-	-

* Major components

Section 3 – Hazards Identification

Emergency overview

Shikkui Shirokabe is a powder that possesses little immediate hazard. A single short-term exposure to the dry powder is not likely to cause serious harm. However, exposure of sufficient duration to wet Shikkui Shirokabe, due to its high alkalinity, can cause serious, potentially irreversible tissue (skin or eye) destruction in the form of chemical (caustic) burns. The same type of tissue destruction can occur if wet or moist areas of the body are exposed for sufficient duration to dry Shikkui Shirokabe.

R-phrases:

R36: Irritating to eyes.
R37: Irritating to respiratory system.
R38: Irritating to skin.
R41: Risk of serious damage to eyes.
R66: Repeated exposure may cause skin dryness or cracking.

S-phrases

S2: Keep out of the reach of children.
S8: Keep container dry.
S22: Do not breathe dust.
S24: Avoid contact with skin.
S25: Avoid contact with eyes.
S26: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S28: After contact with skin, wash immediately with plenty of cold water.
S36: Wear suitable protective clothing.
S37: Wear suitable gloves.
S38: In case of insufficient ventilation wear suitable respiratory equipment.
S39: Wear eye/face protection.
S46: If swallowed, seek medical advice immediately and show this container or label.

Irritating to gastro-intestinal tract. Shikkui Shirokabe should not be eaten.

Section 4 – First Aid and Measures

Eye Contact	Rinse immediately with plenty of water and seek medical advice
Skin Contact	Wash immediately with plenty of cold water
Inhalation	Rinse throat and nose with water. Breathe fresh air. If necessary, get artificial respiration. Seek medical attention.
Ingestion	Rinse mouth with water and drink plenty of water. Do NOT induce vomiting unless directed to do so by medical personnel. Seek medical attention if symptoms appear.

Section 5 – Fire Fighting Measures

Non-flammable. Any method suitable for extinguishing surrounding fire.

Section 6 – Accidental Release Measures

Sweep spilled substance into containers for use if possible, or disposal.

Section 7 - Handling and Storage

Wear recommended personal protective equipment when handling. Store material in a cool, dry, ventilated area.

Section 8 – Exposure Controls and Personal Protection

Engineering Controls: Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

Personal Protection: Avoid eye and skin contact. Avoid breathing vapors. Splash goggles. Synthetic apron. Vapor and dust respirator. Be sure to use an approved respirator or equivalent. Gloves and other clothing to prevent skin exposure.

Section 9 – Physical and Chemical Properties

Appearance: Fine, white powder

Appearance (when applied): Smooth, flat or relief surface

Physical state: Solid (powder)

Shore D Hardness: 70 (ASTM D2240)

Odor: None

Solubility: Very slightly soluble in water

Flash point: Non-flammable (Class A rating, ASTM E84)

Melting point: 580°C/1076°F (calcium hydroxide), 825°C/1517°F (calcium carbonate)

Vapor pressure: Not applicable

Vapor density: Not applicable

Specific gravity: 2.24 (calcium hydroxide), 2.70 (calcium carbonate)

pH: 12-13

Evaporation rate: Not applicable

Section 10 – Stability and Reactivity Information

Stability: The product is stable.

Reaction with various substances: Reacts with strong acids generating carbon dioxide.

Section 11 – Toxicological Information

Toxicity: The product itself and its products of degradation are not toxic.

LD50 (rat): 7340 mg/kg (calcium hydroxide), 6450 mg/kg (calcium carbonate)

Section 12 – Ecological Information

Ecotoxicity: No recognized unusual toxicity to plants or animals.

Relevant Physical and Chemical Properties: See sections 9 and 10.

VOC: 0.7 Grams/Liter, 0.0 Pounds/Gallon (ASTM D3960), which implies a Zero-VOC material

Other properties: mold/mildew resistance (Rating 10, ASTM D3273/D3274)

Certification: Cradle to Cradle (Silver)

Section 13 – Disposal Considerations

Dispose of in accordance with federal, state or local regulations.

100% recyclable either as fertilizer and soil conditioner, or as agent for improving strength and stability of land.

Section 14 – Transport Information

DOT Classification: Not regulated

Special Provisions for Transport: Not applicable

Section 15 – Other Regulatory Information

Risk and Safety Phrases: See section 3.

Section 16 – Other Information

MSDS revision date: 16 Jan 2012

Other important information: Shikkui Shirokabe should be used by knowledgeable persons.

While the information provided in this material safety data sheet is believed to provide a useful summary of the hazards of Shikkui Shirokabe as it is commonly used, the sheet cannot anticipate and provide all of the information that might be needed in every situation. Inexperienced product users should obtain proper training before using this product.

THE MANUFACTURER MAKES NO WARRANTY, EXPRESSED OR IMPLIED, CONCERNING THE PRODUCT OR THE MERCHANTABILITY OR FITNESS THEREOF FOR ANY PURPOSE OR CONCERNING THE ACCURACY OF ANY INFORMATION PROVIDED BY Tagawa Sangyo except that the product shall conform to contracted specifications. The information provided herein was believed by Tagawa Sangyo to be accurate at the time of preparation or prepared from sources believed to be reliable, but it is the responsibility of the user to investigate and understand other pertinent sources of information to comply with all laws and procedures applicable to the safe handling and use of the product, and to determine the suitability of the product for its intended use. Buyer's exclusive remedy shall be for damages and no claim of any kind, whether as to product delivered or nondelivery of product, and whether based on contract, breach of warranty, negligence, or otherwise shall be greater in amount than the purchase price of the quantity of product in respect of which damages are claimed. In no event shall Seller be liable for incidental or consequential damages,

whether Buyer's claim is based on contract, breach of warranty, negligence or otherwise.

In particular, the data furnished in this sheet do not address hazards that may be posed by other materials mixed with Shikkui Shirokabe to produce other products. Users should review other relevant material safety data sheets before working with this or any other lime-based products.