SAFETY DATA SHEET

Date Prepared: 05/22/2015

SDS No: Kamo Manufacturing Co. Inc. Frontier Finish

Frontier Finish

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: Frontier Finish

Kamo Manufacturing Co. Inc.

GENERAL USE: Seal and protect wood flooring.

PRODUCT DESCRIPTION: Waterbased Oil Modified Urethane Wood Finish

CHEMICAL FAMILY: Urethane Dispersion

DISTRIBUTOR

24 HR. EMERGENCY TELEPHONE NUMBERS

CHEM-TEL (Medical and Transportation): 800-255-3924 POISON CONTROL CENTER (Medical): 800-222-1222

PO Box 1525 Augusta, GA 30903

Customer Service: 706-724-1488

2. HAZARDS IDENTIFICATION

GHS CLASSIFICATIONS

Health:

Serious Eye Damage, Category 2A Reproductive Toxicity, Category 1B

Target Organ Toxicity (Single exposure), Category 3 (Respiratory tract irritation)

GHS LABEL



Health hazard

(!)

Exclamation mark

SIGNAL WORD: DANGER HAZARD STATEMENTS

H319: Causes serious eye irritation.

H335: May cause respiratory irritation.

H360: May damage fertility or the unborn child through repeated inhalation exposure.

PRECAUTIONARY STATEMENT(S)

Prevention:

P201: Obtain special instructions before use.

P202: Do not handle until all safety precautions have been read and understood.

P281: Use personal protective equipment as required.

P264: Wash hands thoroughly after handling.

P280: Wear protective gloves/protective clothing/eye protection/face protection.

P261: Avoid breathing fume, gas, mist, vapors, or spray.

P271: Use only outdoors or in a well-ventilated area.

Response:

P308+P313: IF exposed or concerned: Get medical advice/ attention.

P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P337+P313: If eye irritation persists: Get medical advice/attention.

P304+P341: IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.

Storage:

P403+P233: Store in a well-ventilated place. Keep container tightly closed.

Disposal:

P501: Dispose of contents/container according to all local, state and Federal regulations.

EMERGENCY OVERVIEW

PHYSICAL APPEARANCE: Pale yellow hazy liquid

IMMEDIATE CONCERNS: Causes severe eye irritation. May be armful if inhaled.

POTENTIAL HEALTH EFFECTS

EYES: Contact causes severe eye irritation.

SKIN: May be mildly irritating with prolonged or repeated contact.

SKIN ABSORPTION: None

INGESTION: Large doses may cause nausea.

INHALATION: High concentrations may lead to central nervous system effects (drowsiness, dizziness, nausea, headaches)

REPRODUCTIVE TOXICITY

REPRODUCTIVE EFFECTS: Suspected of damaging fertility or the unborn child.

TERATOGENIC EFFECTS: No known significant effects or critical hazards.

CARCINOGENICITY: Not Established

MUTAGENICITY: No known significant effects or critical hazards.

ROUTES OF ENTRY: Eyes, skin, Inhalation.

TARGET ORGAN STATEMENT: Respiratory tract.

CANCER STATEMENT: WARNING: This product contains a chemical known to the State of California to cause birth defects or

other reproductive harm.

SENSITIZATION: Not Established
WARNING CAUTION LABELS: Irritant
PHYSICAL HAZARDS: None Expected.

3. COMPOSITION / INFORMATION ON INGREDIENTS

| Chemical Name | Wt.% | CAS |
|--------------------------|---------|-----------|
| Polyurethane Resin | 25 - 30 | TradeSecr |
| 1-methyl-2-pyrrolidinone | 1 - 5 | 872-50-4 |
| Triethylamine | 1 - 2 | 121-44-8 |
| Water | 65 - 75 | 7732-18-5 |

COMMENTS: If CAS number is "Tradesecr", the specific chemical identity has been withheld as a trade secret.

4. FIRST AID MEASURES

EYES: Immediately flush eyes with plenty of water. Get medical attention, if irritation persists.

SKIN: Wash with soap and water. Get medical attention if irritation develops or persists.

INGESTION: Get immediate medical attention. Do not induce vomiting unless instructed to do so by poison center or physician.

INHALATION: Remove victim to fresh air and monitor. Seek medical advise if irritation persists.

SIGNS AND SYMPTOMS OF OVEREXPOSURE

EYES: Severe burning sensation, tearing, redness, swelling.

SKIN: Prolonged contact may cause irritation marked by redness, slight burning sensation.

SKIN ABSORPTION: No known significant effects or critical hazards.

INGESTION: Nausea with large amounts.

INHALATION: Irritation of nose, throat and lungs with coughing, sneezing, possible difficulty breathing.

CHRONIC EFFECTS: See Section 11.

5. FIRE FIGHTING MEASURES

FLAMMABLE CLASS: NA = Not Applicable

GENERAL HAZARD: None

EXTINGUISHING MEDIA: Not required. Water based material.

HAZARDOUS COMBUSTION PRODUCTS: Carbon monoxide from combustion

EXPLOSION HAZARDS: NA = Not Applicable

FIRE FIGHTING PROCEDURES: Use an extinguishing agent suitable for surrounding fire.

HAZARDOUS DECOMPOSITION PRODUCTS: Decomposition products may include: Carbon dioxide, Carbon monoxide, nitrogen

oxides.

6. ACCIDENTAL RELEASE MEASURES

SMALL SPILL: Avoid runoff into storm sewers and ditches which lead to waterways.

LARGE SPILL: Avoid walking in material. Prevent product from entering into stream, soil, storm sewer or other bodies of water.

ENVIRONMENTAL PRECAUTIONS

WATER SPILL: Avoid discharges into open waterways.

LAND SPILL: Avoid discharge to soil.

7. HANDLING AND STORAGE

GENERAL PROCEDURES: Close container after use.

HANDLING: Wear eye protection, rubber gloves when handling concentrate. **STORAGE:** Store in closed container in an area inaccessible to children.

STORAGE TEMPERATURE: Store at ambient temperatures. **STORAGE PRESSURE:** Store at ambient atmospheric pressure.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

EXPOSURE GUIDELINES

| EXPOSORE GOIDELINES | | | | | | | |
|---|------|--|-------|-----|-------|--------|--------|
| OSHA HAZARDOUS COMPONENTS (29 CFR1910.1200) | | | | | | | |
| | | EXPOSURE LIMITS OSHA PEL ACGIH TLV Supplier OEL | | | | | |
| | | | | | | er OEL | |
| Chemical Name | | ppm | mg/m³ | ppm | mg/m³ | ppm | mg/m³ |
| 1-methyl-2-pyrrolidinone | TWA | | | | | 10 [1] | 40 [1] |
| Tricable de miles | | 25 | 100 | 1 | | | |
| Triethylamine | STEL | | | 3 | | | |

Footnotes:

1. USA. Workplace Environmental Exposure levels (WEEL)

ENGINEERING CONTROLS: Provide mechanical ventilation when used in confined areas, or areas with poor ventilation.

PERSONAL PROTECTIVE EQUIPMENT

EYES AND FACE: Safety glasses with side shields. **SKIN:** Rubber or other chemical resistant gloves.

RESPIRATORY: A respirator is not needed under normal and intended conditions of product use.

PROTECTIVE CLOTHING: No special requirements.

WORK HYGIENIC PRACTICES: Wash with soap and water after handling. Do not eat, drink or smoke while using product.

9. PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE: Liquid

ODOR: Mild amine

ODOR THRESHOLD: Not Established

COLOR: Light amber

pH: 7.5 to 9.0

PERCENT VOLATILE: >60

FLASH POINT AND METHOD: >100C (212F)

FLAMMABLE LIMITS: N/A

AUTOIGNITION TEMPERATURE: NA = Not Applicable

VAPOR PRESSURE: ~ 20 mm Hg at 20°C (68°F)

VAPOR DENSITY: > 1 Air = 1

BOILING POINT: 212° F; 100° C

FREEZING POINT: 32° F; 0° C

MELTING POINT: Not Available

THERMAL DECOMPOSITION: Not Available

SOLUBILITY IN WATER: ~ 70 % **EVAPORATION RATE:** (Water =1) 1.0

DENSITY: ~ 8.51 at 20°C (68°F)

SPECIFIC GRAVITY: 1.02 grams/ml. at 20°C (68°F)

VISCOSITY: Slightly viscous. **(VOC):** 17.570 % by weight

10. STABILITY AND REACTIVITY

REACTIVITY: Stable

HAZARDOUS POLYMERIZATION: Will not occur.

STABILITY: Stable under normal storage and use conditions.

CONDITIONS TO AVOID: Not Established

HAZARDOUS DECOMPOSITION PRODUCTS: Under normal conditions of storage and use, hazardous decomposition products

should not be produced.

INCOMPATIBLE MATERIALS: Strong acids. Strong basis. Strong oxidizing agents. Reducing agents.

11. TOXICOLOGICAL INFORMATION

ACUTE

| Chemical Name | ORAL LD ₅₀ (rat) | DERMAL LD ₅₀ (rabbit) | INHALATION LC ₅₀ (rat) |
|--------------------------|--------------------------------|-------------------------------------|--------------------------------------|
| 1-methyl-2-pyrrolidinone | 4150 | 2200 to 4000 | > 5100 |
| Triethylamine | 460 mg/kg (rat) | 416 mg/kg (rabbit) | |

EYES: Causes eye irritation.

DERMAL LD₅₀: Not Established

SKIN ABSORPTION: Not Established

ORAL LD50: Not Established

INHALATION LC₅₀: Not Established **EYE EFFECTS**: Severe eye irritant.

SKIN EFFECTS: May irritate skin with prolonged or repeated contact.

CHRONIC: Not Established

CARCINOGENICITY

IARC: No listed substance

IRRITATION: Irritant

SENSITIZATION: No known significant effects or critical hazards.

NEUROTOXICITY: Central nervous system effects marked by dizziness, headache, nausea.

GENETIC EFFECTS: Not Established

REPRODUCTIVE EFFECTS: Suspected of damaging fertility or the unborn child.

TARGET ORGANS: Not Established

TERATOGENIC EFFECTS: Not Established

MUTAGENICITY: Not Established

12. ECOLOGICAL INFORMATION

ENVIRONMENTAL DATA: Not Established

ECOTOXICOLOGICAL INFORMATION: Not Established **BIOACCUMULATION**/**ACCUMULATION**: Not Established

AQUATIC TOXICITY (ACUTE): Not Established

CHEMICAL FATE INFORMATION: Not Established

13. DISPOSAL CONSIDERATIONS

DISPOSAL METHOD: Although not a hazardous waste, the discarding or disposal of this material should be done at a properly permitted facility in accordance with the regulations 40CFR 262, 263, 264, and 268. Additionally, the discarding or disposal of this material may be further regulated by state, regional, or local regulations.

FOR LARGE SPILLS: Consult with local and state authorities for large volume disposal.

PRODUCT DISPOSAL: Any method in accordance with local, state, and federal laws. Best method is to recycle or reuse for intended purpose.

EMPTY CONTAINER: Offer container for recycling, or dispose of in trash.

RCRA/EPA WASTE INFORMATION: NA = Not Applicable

14. TRANSPORT INFORMATION

DOT (DEPARTMENT OF TRANSPORTATION)

PROPER SHIPPING NAME: Liquid floor wax, not regulated.

LABEL: None AIR (ICAO/IATA)

SHIPPING NAME: Liquid floor wax, not regulated.

VESSEL (IMO/IMDG)

SHIPPING NAME: Liquid floor wax, not regulated.

15. REGULATORY INFORMATION

UNITED STATES

SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT)

311/312 HAZARD CATEGORIES: Health Hazard - Acute; Health Hazard - Chronic

FIRE: No PRESSURE GENERATING: No REACTIVITY: No ACUTE: Yes CHRONIC: Yes

EPCRA SECTION 313 SUPPLIER NOTIFICATION

| Chemical Name | Wt.% | CAS |
|---------------|-------|----------|
| Triethylamine | 1 - 2 | 121-44-8 |

302/304 EMERGENCY PLANNING

EMERGENCY PLAN: No listed substance

CERCLA (COMPREHENSIVE RESPONSE, COMPENSATION, AND LIABILITY ACT)

CERCLA REGULATORY: Not yet Determined TSCA (TOXIC SUBSTANCE CONTROL ACT)

TSCA REGULATORY: All ingredients are listed on the TSCA Chemical Inventory.

STATES WITH SPECIAL REQUIREMENTS

| Chemical Name | Requirements |
|--------------------------|--|
| 1-methyl-2-pyrrolidinone | Pennsylvania Right to Know Substance Massachusetts Right to Know Substance New Jersey Right To Know Substance Rhode Island Right to Know Substance |

CALIFORNIA PROPOSITION 65: WARNING: This product contains a chemical known to the State of California to cause birth defects or other reproductive harm.

| Chemical Name | Wt.% | Listed |
|--------------------------|-------|------------------------|
| 1-methyl-2-pyrrolidinone | 1 - 5 | Developmental Toxicity |

CARCINOGEN: Not yet Determined

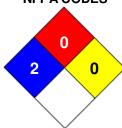
16. OTHER INFORMATION

PREPARED BY: Regulatory Affairs Department Date Prepared: 05/22/2015

HMIS RATING

| HEALTH | 2 |
|---------------------|---|
| FLAMMABILITY | 0 |
| PHYSICAL HAZARD | 0 |
| PERSONAL PROTECTION | В |

NFPA CODES



MANUFACTURER DISCLAIMER: This company cannot anticipate all conditions of handling and use of this product. Therefore, this company accepts no responsibility for results obtained by the application of this information, or the safety and suitability of the product either alone or in combination with other products. It is the responsibility of the employer and/or user to provide a safe workplace, using health and safety information contained herein as a guide. This company will accept no liability for damages or losses incurred from the improper handling and use of this product.