

MATERIAL SAFETY DATA SHEET

KlingStone Paths Klear

1. PRODUCT AND COMPANY IDENTIFICATION

TRADE NAME: KlingStone Paths

PRODUCT NAME: Klear

MANUFACTURED BY

Kling Paths, LLC

235 Pigeon Street

Waynesville, NC 28786

800-942-5151 US/Canada * 828-456-9970 International

24 HOUR EMERGENCY TELEPHONE NUMBER

Chemtrec: United States 800-424-9300

International 703-527-3887

2. INFORMATION ON HAZARDOUS INGREDIENTS

Chemical Name	Wt. %	CAS#
Isophorone diisocyanate prepolymer	> 60	113126-53-7
Isophorone diisocyanate	20-25	4098-71-9
1,3-Dioxolan-2-one, 4-methyl-	< 15	108-32-7

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

PHYSICAL APPEARANCE: Colorless liquid.

IMMEDIATE CONCERNS: Irritating to eyes, respiratory system, and skin. Inhalation at levels above the occupational exposure limit could cause risk of damage to respiratory system. The onset of respiratory symptoms may be delayed for several hours after exposure.

POTENTIAL HEALTH EFFECTS

EYES: Liquids, vapors, or mists are irritating to the eyes and can cause stinging, burning or tearing.

SKIN: Moderate irritant. Repeated and/or prolonged contact may cause skin sensitization.

INGESTION: Ingestion may cause irritation of the gastrointestinal tract and gastrointestinal discomfort with any or all of the following symptoms: nausea, vomiting, lethargy, or diarrhea.

INHALATION: Inhalation of vapors or mist at concentrations above the exposure limit can cause respiratory tract irritation. (nose, throat, lungs) Chronic inhalation can result in sensitization.

ROUTES OF ENTRY: Inhalation, skin contact, eye contact, ingestion.

SENSITIZATION: Any individual with isocyanate sensitization should not be exposed to this product. These individuals can react to exposure well below the exposure limit. Symptoms can occur immediately or several hours after exposure.

4. FIRST AID MEASURES

EYES: Immediately flush eyes with plenty of water for at least 15 minutes, lifting upper and lower eyelids occasionally. Seek immediate medical attention.

SKIN: Remove contaminated clothing. Wash affected areas thoroughly with soap and water. Wash clothing thoroughly before reuse. For severe exposure seek medical attention immediately. For lesser exposure seek medical attention if swelling or redness occurs, or if irritation persists after being washed.

INGESTION: Do not induce vomiting. Never give anything by mouth to a drowsy or unconscious person. If the individual is conscious, rinse mouth with water. Give 1 to 2 cups of water to drink. Seek immediate medical attention.

INHALATION: Remove individual from exposure, keep warm and at rest. If dizzy or shows signs of respiratory distress, seek immediate medical attention. Asthmatic-type symptoms may develop and may be immediate or delayed up to several hours.

5. FIRE FIGHTING MEASURES

FLASHPOINT AND METHOD: > 200 °F (93.3 °C) - Closed Cup

EXTINGUISHING MEDIA: Dry chemical, Carbon dioxide, Chemical foam, Water fog or spray.

HAZARDOUS COMBUSTION PRODUCTS: Carbon monoxide, Carbon dioxide, Nitrous oxide and isocyanate vapors.

COMMENT: Product reacts with water to produce carbon dioxide which may rupture closed containers.

FIRE FIGHTING PROCEDURES: Isolate fuel supply from fire. Use water spray to cool fire-exposed surfaces and containers. Fire fighters should wear self-contained breathing apparatus in addition to emergency fire fighting protective clothing.

6. ACCIDENTAL RELEASE MEASURES

SMALL SPILL: Clean up spills wearing appropriate personal protective equipment. (See Section 8) Absorb with dry chemical absorbent, earth, sand, or any other inert material. Place in a chemical waste container. Move to outside well-ventilated area. Treat with 10 parts decontamination solution to 1 part isocyanate. Mix well. Allow to stand uncovered 48 hours before disposal.

LARGE SPILL: Eliminate all ignition sources. Evacuate and ventilate the area. Create a dike or trench to contain materials. Prevent entry into waterways, sewers, basements or confined areas. Clean-up personnel should wear appropriate personal protection equipment. (See Section 8) Absorb with dry chemical absorbent, earth, sand, or any other inert material. Place in a chemical waste container. Move to outside well-ventilated area. Treat with 10 parts decontamination solution to 1 part isocyanate. Mix well. Allow to stand uncovered 48 hours before disposal. Clean spill area with decontamination solution and allow to stand for 15 minutes before removal.

DECONTAMINATION SOLUTION: Decontamination solution: concentrated ammonia (5%), detergent (2%), and water (93%)

COMMENT: Dispose in accordance with good industrial practice and in compliance with federal, state, and local environmental protection regulations.

7. HANDLING AND STORAGE

HANDLING: Wear appropriate personal protective equipment. Use in a well ventilated area. Avoid smoking, bare lights, or ignition sources. Avoid physical damage to containers.

STORAGE: Protect from atmospheric moisture. Keep containers sealed in order to avoid contamination. Do not reseal if contaminated. After container has been opened, blanket with nitrogen before resealing. Store indoors in a cool and well-ventilated area.

STORAGE TEMPERATURE: 40 °F – 90 °F (4.4 °C – 32.2 °C)

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

EXPOSURE LIMITS:

Component	CAS#	OSHA/PEL	ACGIH/TLV
Isophorone diisocyanate	4098-71-9	0.005 ppm (Skin) 0.045 mg/m	0.005 ppm 0.045 mg/m

ENGINEERING CONTROLS: Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels.

PERSONAL PROTECTIVE EQUIPMENT

EYES AND FACE: Wear safety glasses with side shields.

SKIN: Wear gloves and clothing to cover exposed skin.

RESPIRATORY: During application, if exposure of product can exceed the PEL/TLV, use appropriate respiratory protection to protect from overexposure.

WORK HYGIENIC PRACTICES: Follow good normal hygiene practices. Avoid contact with skin. Avoid eating, drinking, or smoking while using this product. Wash hands thoroughly after use.

9. PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE: Liquid

ODOR: Slightly musty

COLOR: Colorless

BOILING POINT: Not Determined

FREEZING POINT: Not Determined

SOLUBILITY IN WATER: Partial

VAPOR PRESSURE: 0.0012 mm Hg at 77 °F (25 °C)

SPECIFIC GRAVITY: 1.04 to 1.06 (water=1) at 77°F (25 °C)

VISCOSITY: 900 – 1300 Centipoise at 77 °F (25 °C)

10. STABILITY AND REACTIVITY

CONDITIONS TO AVOID: Temperature extremes, Container contamination, Moisture

STABILITY: Stable under recommended storage conditions.

POLYMERIZATION: Polymerization may occur at elevated temperatures.

HAZARDOUS DECOMPOSITION PRODUCTS: Carbon monoxide, Carbon dioxide, Nitrous oxide and isocyanate vapors.

INCOMPATIBLE MATERIALS: Water, alcohol, amines, bases and acids.

11. TOXICOLOGICAL INFORMATION

Component	Oral LD (rat)	Dermal LD (rabbit)	Inhalation LC
Isophorone diisocyanate	4825 mg/kg	>7000 mg/kg	123 mg/m

1,3-Dioxolan-2-one, 4-methyl-	> 5000 mg/kg	> 2000 mg/kg	
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CARCINOGENICITY

IARC: Not classified as a carcinogen.

NTP: Not classified as a carcinogen.

OSHA: Not classified as a carcinogen.

ACGIH: Not classified as a carcinogen.

12. ECOLOGICAL INFORMATION**ECOTOXICOLOGICAL INFORMATION:**

IPDI: LC₀ >= 72.3 mg/L/96h (brachydanio rerio) EC₅₀ > 27 mg/L/48h (daphnia magna)

COMMENTS: No testing for product as a whole.

13. DISPOSAL CONSIDERATIONS

DISPOSAL METHOD: Disposal should be in accordance with local, state, provincial or national regulations.

EMPTY CONTAINER: Empty containers should be decontaminated and either passed to an approved drum recycler or destroyed.

RCRA HAZARD CLASS: If discarded as purchased, this material is not a hazardous waste under RCRA 40 CFR 261.

COMMENTS: The generation of waste should be avoided or minimized whenever possible. Chemical waste, even small quantities, should never be poured down drains, sewers or waterways.

14. TRANSPORT INFORMATION

DOT (DEPARTMENT OF TRANSPORTATION)

Not regulated for transportation.

15. REGULATORY INFORMATION

UNITED STATES

SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT)

311/312 HAZARD CATEGORIES: Acute, Chronic, Sensitizing substance, Reactive

313 REPORTABLE COMPONENTS:

Component	CAS#
Isophorone diisocyanate (Category Diisocyanate Compounds)	4098-71-9

CERCLA (COMPREHENSIVE ENVIRONMENTAL RESPONSE AND LIABILITY ACT)

None.

TSCA (TOXIC SUBSTANCE CONTROL ACT)

TSCA REGULATORY: All ingredients are on TSCA inventory.

RCRA STATUS: Not hazardous if discarded in its purchased form. However, under RCRA, it is the responsibility of the product user to determine at the time of disposal whether a material containing the product or derived from the product should be classified as a hazardous waste (40 CFR 261.20-24).

16. OTHER INFORMATION

HMIS RATING: Health - *3, Flammability - 1, Physical Hazard - 1

HMIS RATING NOTES: If present, the asterisk signifies a chronic health hazard.

Rating system: 0 = low hazard to 4 = high hazard

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KEY LEGEND INFORMATION:

ACGIH - American Conference of Governmental Industrial Hygienists

EPA - Environmental Protection Agency

IARC - International Agency for Research on Cancer

NTP - National Toxicology Program

OEL - Occupational Exposure Limit

OSHA - Occupational Safety and Health Administration

PEL - Permissible Exposure Limit

STEL - Short Term Exposure Limit

TLV - Threshold Limit Value

TWA - Time Weighted Average

PREPARED BY: L.P.

DATE ISSUED: 09/07/2009

REVISION # and DATE: Rev #4, 07/08/2014