SAFETY DATA SHEET

KlingStone Paths Amber

Section 1: Product and Company Identification

Trade Name: KlingStone Paths
Product Name: Amber

Manufacturer:
KlingStone Paths, LLC
235 Pigeon Street
Waynesville, NC 28786
Phone 800-942-5151 US/Canada * 828-456-9970 International

24 Hour Emergency Contact Number:
CHEMTREC United States/Canada 800-424-9300

Section 2: Hazards Identification

GHS Classifications

Health:
Acute Toxicity (Inhalation), Category 4
Skin Irritation, Category 2
Eye Irritation, Category 2A
Respiratory Sensitization, Category 1
Skin Sensitization, Category 1
Target Organ Toxicity (Single Exposure), Category 3
Target Organ Toxicity (Repeated exposure), Category 2

GHS Label


Health hazard


Exclamation mark

Signal Word: Danger.

Hazard Statements

H315: Causes skin irritation.
H317: May cause an allergic skin reaction.
H319: Causes serious eye irritation.
H332: Harmful if inhaled.
H334: May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H335: May cause respiratory irritation.
H373: May cause damage to respiratory system through prolonged or repeated exposure.

Precautionary Statements

Prevention:

P260: Do not breathe mist, vapors, and spray.
P264: Wash skin thoroughly after handling.
P271: Use only outdoors or in a well-ventilated area.
P272: Contaminated work clothing should not be allowed out of the workplace.
P280: Wear protective gloves, protective clothing, eye protection and face protection.
P284: In case of inadequate ventilation wear respiratory protection.

Response:

P302+P352: IF ON SKIN: Wash with plenty of soap and water.
P362: Take off contaminated clothing.
P333+P313: If skin irritation or rash occurs: Get medical attention.
P304+P340: IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing.
P312: Call a POISON CENTER or doctor if you feel unwell.
P342+P311: If experiencing respiratory symptoms: Call a POISON CENTER or physician.
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 attention.
P314: Get medical advice if you feel unwell.

Section 3: Composition/Information on Ingredients

Component	% (weight)	Product Identifier
MDI Prepolymer	55-65	CAS No. 59675-67-1
4,4'-Diphenylmethane diisocyanate	10-20	CAS No. 101-68-8
2,4'-Diphenylmethane diisocyanate	10-20	CAS No. 5873-54-1
1,3-dioxolan-2-one, 4-methyl-	≤ 10	CAS No. 108-32-7
UV Stabilizers	≤ 2	

Section 4: First Aid Measures

Eyes: Immediately flush eyes with plenty of water. Remove contact lenses, if present. Seek medical attention if irritation persists.

Skin: Immediately flush skin with plenty of water. Remove contaminated clothing and shoes. Seek medical attention if irritation or rash occurs.

Ingestion: If person is conscious, wash out mouth with water. Do not induce vomiting unless instructed to do so by a poison center or physician.

Inhalation: Move person to fresh air. Seek medical attention if symptoms of respiratory distress occur. Symptoms may be delayed for several hours.

Section 5: Firefighting Measures

Extinguishing Media: Water fog, foam, dry chemical, or carbon dioxide.

Hazardous Combustion Products: Carbon oxides, nitrogen oxides, isocyanates, and trace amounts of hydrogen cyanide.

Explosion Hazards: Water contamination produces carbon dioxide gas. This may cause pressurization or explosion of containers.

Fire Fighting Equipment: Exposed firefighters must wear NIOSH-approved positive pressure self-contained breathing apparatus with full-face mask and full protective clothing.

Section 6: Accidental Release Measures

Personal Protection: Wear protective equipment listed in Section 8.

Small Spill: Isolate the area and prevent entry of unnecessary and unprotected personnel. Do not walk through or otherwise scatter spilled product. Absorb with dry chemical absorbent. Place in a chemical waste container.

Large Spill: Same procedure as for a small spill. Prevent entry into waterways, sewers, basements, or confined areas. Allow to stand uncovered 48 hours before closing the waste container.

Comment: Avoid using earth, sand, and clay as absorbents as these can be wet. Isocyanates react with water to form carbon dioxide. Carbon dioxide functions as a blowing agent, causing the product to foam. Allow the waste container to stand uncovered 48 hours before closing. Reaction with water can be slow. Build-up of carbon dioxide in a closed container can rupture the container.

General Procedures: Clean spill area with a decontamination solution. Suggested formulation: Sodium carbonate (5 10%), liquid detergent (1-2%), water (88-94%). Alternate formulation: Concentrated ammonia (3-8%), liquid detergent (1-2%), water (90-96%). Ensure adequate ventilation to prevent overexposure of ammonia.

Section 7: Handling and Storage

Handling: Do not get in eyes, on skin or on clothing. Wash hands before eating, drinking, or smoking. Do not breathe vapors or mists. Use only with adequate ventilation. Keep container closed when not in use. Do not reseal if contaminated. Keep away from heat and flame.

Storage: Store in tightly closed containers in cool, dry, and well-ventilated area away from heat or sources of ignition. Keep out of direct sunlight.

Storage Temperature: 4.4°C - 32.2°C (40°F - 90°F)

Section 8: Exposure Controls/Personal Protection

Exposure limits:

Component	CAS No.	OSHA/PEL	ACGIH/TLV
4,4'-Diphenylmethane diisocyanate	101-68-8	0.02 ppm (Ceiling) 0.20 mg/m^3 (Ceiling)	0.005 ppm 0.051 mg/m^3

Engineering Controls: Local exhaust ventilation used in combination with general ventilation as necessary to control air contaminates.

Eyes and Face: Wear a face shield and chemical safety glasses or goggles.

Skin: Wear impervious gloves. Cover exposed skin.

Respiratory: For airborne exposure above the exposure limit(s), wear a NIOSH approved air-purifying respirator equipped with organic vapor cartridges. For situations where the atmospheric levels may exceed the level for which an air-purifying respirator is effective, use a positive-pressure air-supplying respirator.

Work Hygienic Practices: Avoid eating, drinking, or smoking while using this material. Wash hands thoroughly after handling.

Section 9: Physical and Chemical Properties

Appearance	Amber liquid.
Odor	Slightly musty.
Autoignition Temperature	> 300°C (572°F)
Freezing Point	Not established.
Boiling Point	Not established.
Flash Point (Closed Cup)	> 93.3°C (200°F)
Vapor Pressure	< 0.001 mmHg at 25°C (77°F)
Vapor Density (air = 1)	Heavier than air.
Solubility in water	Insoluble.
Specific Gravity (water = 1)	1.06 at 25°C (77°F)
Viscosity (centipoise)	1500 at 25°C (77°F)

Section 10: Stability and Reactivity

Stability: Stable.

Hazardous Polymerization: Can be caused by elevated temperatures.

Hazardous Decomposition Products: Carbon oxides, nitrogen oxides, isocyanates, and trace amounts of hydrogen cyanide.

Incompatible Materials: This product will react with any materials containing active hydrogens such as water, alcohol, amines, bases, and acids. The reaction with water is very slow under 50°C (122°F) but is accelerated at higher temperatures.

Section 11: Toxicological Information

Acute:

Component	Oral LD_{50} (rat)	Dermal LD_{50} (rabbit)	Inhalation LC_{50} (rat)
4,4'-Diphenylmethane diisocyanate	> 10000 mg/kg	> 9400 mg/kg	1.36 mg/l/4h
1,3-dioxolan-2-one, 4-methyl-	29100 mg/kg	23800 mg/kg	

Carcinogenicity:

IARC: Not regulated as a carcinogen.
NTP: Not regulated as a carcinogen.
OSHA: Not regulated as a carcinogen.

Section 12: Ecological Information

Ecotoxicological Information:

MDI: LC_{50} (zebra fish) > 500 mg/l/96h; EC_{50} (Daphnia magna) > 500 mg/l/24h

Section 13: Disposal Considerations

Disposal Method: Dispose in accordance with local, state, provincial or national regulations.

Empty Container: Decontaminate and pass to an approved drum recycler or destroy.

RCRA/EPA Waste Information: If discarded in its purchased form, this material is not a RCRA hazardous waste

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

Section 14: Transport Information

U.S. DOT: Not regulated when shipped below reportable quantity.
ICAO/IATA: Not regulated.
IMO/IMDG: Not regulated.

Section 15: Regulatory Information

United States

SARA Title III (Superfund Amendments and Reauthorization Act)

311/312 Hazard Categories: Acute, Chronic, Reactive.

313 Reportable Components:

Component	CAS No.
4,4'-Diphenylmethane diisocyanate (Category Diisocyanate Compounds)	101-68-8

CERCLA (Comprehensive Environmental Response and Liability Act)

Component	RQ (lbs)
4,4'-Diphenylmethane diisocyanate	5000

TSCA (Toxic Substances Control Act): All components are in TSCA inventory**.**

RCRA Status: If discarded in its purchased form, this material is not a RCRA hazardous waste.

National Response Center: Any spill or release to the environment above the RQ must be reported to the National Response Center (800-424-8802).

Section 16: Other Information

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Abbreviations and Acronyms:

ACGIH	American Conference of Governmental Industrial Hygienists
CAS	Chemical Abstracts Service
EC_{50}	Median effective concentration
EINECS	European Inventory of Existing Commercial Chemical Substances
GHS	Globally Harmonized System of Classification and Labelling of Chemicals
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
ICAO	International Civil Aviation Organization
IMDG	International Maritime Dangerous Goods
IMO	International Maritime Organization
LC_{50}	Lethal concentration to 50% of exposed laboratory animals
LD_{50}	Lethal dose to 50% of exposed laboratory animals
TWA	Time-weighted average
TLV	Threshold limit value
NIOSH	US National Institute of Occupational Safety and Health
NE	Not established
NTP	US National Toxicology Program
OEL	Occupational exposure limit
OSHA	US Occupational Safety Health Administration
PEL	Permissible exposure limit
RQ	Reportable quantity
STEL	Short term exposure limit
U.S. DOT	United States Department of Transportation