

SAFETY DATA SHEET

KlingStone 40

Section 1: Product and Company Identification

Trade Name: KlingStone

Product Name: 40

Manufacturer:

KlingStone, Inc.

235 Pigeon Street

Waynesville, NC 28786

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

24 Hour Emergency Contact Number:

CHEMTREC United States 800-424-9300 * International 703-527-3887

Section 2: Hazards Identification

GHS Classifications

Health:

Acute Toxicity (Inhalation), Category 4

Skin Irritation, Category 2

Eye Irritation, Category 2

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 or spray.
- P264: Wash hands thoroughly after handling.
- P271: Use only outdoors or in a well-ventilated area.
- P280: Wear protective gloves, protective clothing, eye protection and face protection.
- P285: In case of inadequate ventilation wear respiratory protection.

Response:

- P302+P352: IF ON SKIN: Wash with plenty of soap and water.
- 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.
- 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.

Section 3: Composition/Information on Ingredients

| Component | % (weight) | Product Identifier |
|--|------------|--------------------|
| 1,3-dioxolan-2-one, 4-methyl- | 25-40 | CAS No. 108-32-7 |
| Polymeric diphenylmethane diisocyanate | 20-30 | CAS No. 9016-87-9 |
| Diphenylmethane 4,4'-diisocyanate | 20-30 | CAS No. 101-68-8 |
| MDI Prepolymer | 10-30 | CAS No. 59675-67-1 |

Section 4: First Aid Measures

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

Skin Contact: 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 Procedures: Standard.

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.

Spill Procedures: Isolate the hazard and deny entry to unnecessary and unprotected personnel. Do not walk through or otherwise scatter spilled material. Small spills: Absorb with dry chemical absorbent, earth, sand or any other inert material. Allow to stand uncovered 48 hours before closing container. Large spills: Create a dike or trench to contain product. Follow same procedure as for a small spill.

Environmental Precautions and Cleanup Methods: Prevent from entering into soil, ditches, sewers, waterways and/or groundwater. 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 |
|-----------------------------------|----------|--|--------------------------------------|
| Diphenylmethane 4,4'-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 contaminants.

Eye/Face Protection: Wear a face shield and chemical safety glasses or goggles.

Skin Protection: Wear impervious gloves. Cover exposed skin.

Respiratory Protection: 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.

Section 9: Physical and Chemical Properties

| | |
|------------------------------|------------------------------|
| Appearance | Brown liquid. |
| Odor | Slightly musty. |
| Odor Threshold | No data. |
| Melting Point | No data. |
| Freezing Point | No data. |
| Boiling Point | No data. |
| Flash Point (Closed Cup) | > 93.3°C (200°F) |
| Evaporation Rate | No data. |
| Flammable Limits In Air | No data. |
| Vapor Pressure | < 0.0001 mmHg at 25°C (77°F) |
| Vapor Density (air = 1) | Heavier than air. |
| Solubility in water | Partial, reacts with water. |
| Autoignition Temperature | No data. |
| Decomposition Temperature | No data. |
| Specific Gravity (water = 1) | 1.18 - 1.21 at 25°C (77°F) |
| Viscosity (centipoise) | 40 - 75 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.

Incompatibilities: 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) |
|-----------------------------------|-----------------------------|----------------------------------|--------------------------------------|
| Diphenylmethane 4,4'-diisocyanate | > 10000 mg/kg | > 9400 mg/kg | 0.49 mg/L/4h (respirable aerosol) |
| 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: LC₅₀ (zebra fish) > 500 mg/L/96h. EC₅₀ (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 regulated quantity (RQ).**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. |
|---|----------|
| Diphenylmethane 4,4'-diisocyanate (Category Diisocyanate Compounds) | 101-68-8 |

CERCLA (Comprehensive Environmental Response and Liability Act)

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

TSCA (Toxic Substances Control Act): All components are on 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

Date Issued: September 13, 2005

Revised: April 29, 2015 Rev #7

Changed from previous version: Update to meet requirements of 29 CFR 1910.1200 Hazard Communication Standard (HazCom 2012)

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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 |