SAFETY DATA SHEET

Cell-Tek Geosynthetics, LLC / Gravel-Lok CLEAR formula

Section 1: Product and Company Identification

Trade Name: Cell-Tek Geosynthetics, LLC

Product Name: Gravel-Lok CLEAR

Manufacturer:

Cell-Tek Geosynthetics, LLC 2431 Crofton Lane, Suite 9 Crofton, Maryland 21114

Phone US/Canada: 888-851-0051 / International: 410-721-4844

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 1 Skin Irritation, Category 2 Eye Irritation, Category 2 Respiratory Sensitization, Category 1 Skin Sensitization, Category 1 Target organ toxicity single exposure, Category 3

GHS Label







Signal Word: Danger.

Hazard Statements

H315: Causes skin irritation.

H317: May cause an allergic skin reaction.

H319: Causes serious eye irritation.

H330: Fatal if inhaled.

H334: May cause allergy or asthma symptoms or breathing difficulties if inhaled.

H335: May cause respiratory irritation.

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.

P284: 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+P411: If experiencing respiratory symptoms: Call a 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
Isophorone diisocyanate prepolymer	> 60	CAS No. 113126-53-7
Isophorone diisocyanate	20-25	CAS No. 4098-71-9
1,3-Dioxolan-2-one, 4-methyl-	< 15	CAS No. 108-32-7

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 can 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. <u>Small spills:</u> Absorb with dry chemical absorbent, earth, sand or any other inert material. Allow to stand uncovered 48 hours before closing container. <u>Large spills:</u> 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: $15.6^{\circ}\text{C} - 32.2^{\circ}\text{C} (60^{\circ}\text{F} - 90^{\circ}\text{F}).$

Section 8: Exposure Controls/Personal Protection

Exposure limits:

Component	CAS No.	OSHA/PEL	ACGIH/TLV
Isophorone diisocyanate	4098-71-9	0.005 ppm (Skin) 0.045 mg/m ³ (Skin)	0.005 ppm 0.045 mg/m ³

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

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 Colorless 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 $0.0012 \text{ mmHg at } 25^{\circ}\text{C } (77^{\circ}\text{F})$

Vapor Density (air = 1) Heavier than air.

Solubility in water Insoluble, reacts with water

Autoignition Temperature No data Decomposition Temperature No data

Specific Gravity (water = 1) 1.04 - 1.06 at 25°C (77°F) Viscosity (centipoise) 900 - 1300 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)
Isophorone diisocyanate	4825 mg/kg		123 mg/m ³ /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:

<u>IPDI</u>: $LC_0 \ge 72.3 \text{ mg/L/96h}$ (brachydanio rerio) $EC_{50} > 27 \text{ mg/L/48h}$ (daphnia magna)

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. 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.
Isophorone diisocyanate (Category Diisocyanate Compounds)	

CERCLA (Comprehensive Environmental Response and Liability Act) None

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.

Section 16: Other Information

Date Issued: September 7, 2009 Revised: April 29, 2015 Rev #5

Changed from previous version: Update to meet requirements of 29 CFR 1910.1200 Hazard

Communication Standard (HazCom 2012)

Manufacturer Disclaimer: The information in this SDS was obtained from sources that we believe are reliable. The information is provided without warranty, implied or expressed, concerning accuracy. The manufacturer assumes no legal responsibility for use or reliance on this information. This SDS is provided solely for the purpose of conveying health, safety, and environmental information. This SDS is not a specification data sheet. Some of the information and conclusions may be derived from sources other than test data on the material itself.

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