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SDS No. E.1.7.1.

## Section 1 – Product Identification

IDENTITY: *Product Name:* **InjectProECO-SOIL**  
*Product Use Description:* **Hydrophobic Polyurethane Injection Grout Ground Stabilizer**

AQUAFIN, INC.  
505 BLUE BALL RD. #160  
ELKTON, MD 21921

24 hr Emergency Phone: Chem-Tel (800) 255-3924  
Information Phone No. (410) 392-2300  
[www.aquafin.net](http://www.aquafin.net) [info@aquafin.net](mailto:info@aquafin.net)

Recommended use of the chemical and restriction on use: Refer to the product technical data sheet.  
For industrial and professional users.

## Section 2 – Hazards Identification

### GHS Classification:

Resp. Sens. 1	H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
Carc. 2	H351	Suspected of causing cancer.
STOT RE 2	H373	May cause damage to organs through prolonged or repeated exposure.
Acute Tox. 4	H332	Harmful if inhaled.
Skin Irrit. 2	H315	Causes skin irritation.
Eye Irrit. 2A	H319	Causes serious eye irritation.
Skin Sens. 1	H317	May cause an allergic skin reaction.
STOT SE 3	H335	May cause respiratory irritation.

### GHS Label element:

#### Hazard Pictograms



GHS07

GHS08

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.
H351:	Suspected of causing cancer.
H373:	May cause damage to organs through prolonged or repeated exposure.

#### Precautionary Statements:

##### Prevention:

P102:	Keep out of reach of children.
P260:	Do not breathe mist, vapors or spray.
P264:	Wash skin thoroughly after handling.
P271:	Use only outdoors or in a well-ventilated area.
P270:	Do not eat, drink or smoke when using this product.
P280:	Wear protective gloves/protective clothing/eye protection/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.  
 P362: Take off contaminated clothing and wash before reuse.  
 P304 + P340: IF INHALED: Remove victim 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 advice/attention.

**Storage:**

P403 + P410: Store in a well-ventilated place. Keep container tightly closed.  
 P405: Store locked up.

**Disposal:**

P501: Dispose of contents/container in accordance with local/regional/national/international regulations.

**Section 3 – Composition / Information on Hazardous Ingredients**

<b>Component:</b>	<b>CAS No.</b>	<b>% (Weight)</b>
4,4'-methylenediphenyl diisocyanate	101-68-8	10 - 25
Diphenylmethanediisocyanate, isomeres and homologues	9016-87-9	25 - 50
Reaction mass of 4,4'-methylenediphenyldiisocyanate and o-(p-isocyanatobenzyl) phenylisocyanat		2.5 - 10

**Note:** There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

**Section 4 – First Aid Measures**

**General information:** Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

**Inhalation:** Supply fresh air and to be sure call for a doctor. In case of unconsciousness, place patient stably in side position for transportation.

**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.

**Skin Contact:** Immediately wash with water and soap and rinse thoroughly. Do not use solvents or thinners. Remove contaminated clothing and shoes. Seek medical advice if irritation or rash occurs. Wash clothing before reuse.

**Eye Contact:** Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor. Remove contact lenses, if present. Seek medical attention if irritation persists.

**Section 5 – Fire Fighting Measures**

**Extinguishing Media:** CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

**Fire Fighting Procedures:** Standard. As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. Containers can build up pressure if exposed to heat (fire). Cool with water spray. Do not scatter material with high pressure water streams.

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

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

### Section 6 – Accidental Release Measures

**Person-related Safety Precautions:** Provide plenty of fresh air. Avoid eye and skin contact. Avoid inhalation of vapors. Wear personal protective equipment. Remove or eliminate all ignition sources.

**Methods for cleaning-up:** Prevent from entering into soil, ditches, sewers, waterways and/or groundwater. Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust). Dispose contaminated material as waste according to item 13. Ensure adequate ventilation.

**Waste Disposal Method:** Dispose in accordance with local, state and federal regulations.

**Ecological Information:** Do not allow product to reach ground water, bodies of water, or storm water or sewage systems.

### Section 7 – Handling and Storage

**Handling:** Avoid contact with eyes, skin and clothing. Wash thoroughly after handling. Follow all SDS/label precautions even after the container is emptied because it may retain product residues. Use only with adequate ventilation. Keep container closed when not in use. Do not reseal if contaminated. Keep away from heat and flame.

**Storage:** Keep container tightly closed when not in use. Do not store in direct sunlight. Avoid UV light.

**Storage Temperature:** ~40°F - ~90°F. (4°C – 32°C)

### Section 8 – Exposure Controls / Personal Protection

**Exposure Limits:**

COMPONENT	CAS NUMBER	OSHA/PEL	ACGIH/TLV
4,4'-methylenediphenyl diisocyanate	101-68-8	0.02 ppm (Ceiling)	0.005 ppm

**Engineering Controls:** Use adequate ventilation.

**Respiratory Protection:** Use local exhaust ventilation. For airborne exposure above 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.

- Skin Protection:** Wear chemical resistant protective clothing and footwear impervious to the product if there is a potential for skin contact.
- Hand Protection:** Glove(s): neoprene. The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
- Eye Protection:** Use tightly sealed safety goggles or face shield.
- Other Protective Equipment:** A safety shower and eye wash fountain should be readily available.
- Work/Hygienic Practices:** Wash hands before breaks and after work, and before eating, drinking or smoking.

## Section 9 – Physical and Chemical Properties

<b>Physical state:</b>	Liquid
<b>Color:</b>	Light Brown
<b>Odor:</b>	Characteristic
<b>Solubility in water:</b>	Not difficult to mix. Reacts with water.
<b>Boiling point:</b>	No data.
<b>Flash point:</b>	Not Applicable.
<b>Vapor Pressure:</b>	No data.
<b>Flammability:</b>	Not Applicable.
<b>Specific Gravity (water = 1) at 25°C:</b>	1.09 -1.11 g/cm <sup>3</sup>
<b>Viscosity, (kinematic, dynamic):</b>	Not determined.
<b>Auto ignition Temperature:</b>	Product is not self-igniting.
<b>Ignition Temperature:</b>	752°F (400°C)
<b>Lower explosion Limit:</b>	0.3 Vol %
<b>Upper explosion Limit:</b>	12.5 Vol %
<b>Organic solvent content:</b>	0.0%
<b>VOC content:</b>	0.0 g/l (0.00 lb./gal)

## Section 10 – Stability and Reactivity

- Reactivity:** No dangerous reaction known under conditions of normal use.
- Hazardous Decomposition Products:** No dangerous decomposition products known.
- Chemical Stability:** Stable under normal temperatures and pressures. Keep away from heat sources. Contains the following stabilizer(s): MEHQ.
- Conditions To Avoid:** Heat and light.
- 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

<b>Acute toxicity:</b> 4,4'-methylenediphenyl diisocyanate	Dermal:	LD50	>9400 mg/kg (rabbit).
	Oral:	LD50	2200 mg/kg (mouse)

diphenylmethanediisocyanate, isomeres and homologues      Dermal:      LD50 >10000 mg/kg (rat).  
Oral:      LD50 >9400 mg/kg (rabbit).  
LD50 >10000 mg/kg (rat).

**Carcinogenity:**

IARC: 9016-87-9      diphenylmethanediisocyanate, isomeres and homologues  
101-68-8      4,4'-methylenediphenyl diisocyanate

NTP: None of the ingredients is listed.

OSHA: None of the ingredients is listed.

**Section 12 – Ecological Information**

**Aquatic toxicity:**

**9016-87-9 diphenylmethanediisocyanate, isomeres and homologues**

EC50/24 h >1000 mg/l (daphnia)  
EC50/96 h >1000 mg/l (fish)  
EC50/72 h >1640 mg/l (algae)

**101-68-8 4,4'-methylenediphenyl diisocyanate**

LC50/96 h >1000 mg/l (fish)  
EC50/24 h >1000 mg/l (daphnia)

**Reaction mass of 4,4'-methylenediphenyldiisocyanate and o-(p-isocyanatobenzyl)phenylisocyanat**

LC50/96 h >1000 mg/l (fish)  
EC50/24 h >1000 mg/l (daphnia)

**Persistence and degradability:** No further relevant information available.

**Behavior in environmental systems:**

**Bioaccumulative potential** No further relevant information available.

**Mobility in soil** No further relevant information available.

**Additional ecological information:**

**General notes** Water hazard class 1 (Self-assessment): slightly hazardous for water.  
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

**Section 13 – Disposal Considerations**

**Product waste:** Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

**Packaging waste:** Disposal must be made according to official regulations.

**Section 14 – Transport Information**

**USDOT (Domestic Surface):** Not regulated when shipped below regulated quantity (RQ).

**IMO (Ocean):** Not regulated

**IATA/ICAO (Air):** Not regulated

**Section 15 – Regulatory Information**

**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.

**US Federal Regulatory Information:**

**SARA Title III (Superfund Amendments and Reauthorization Act):**

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

**313 Reportable Components:**

	CAS NUMBER
Diphenylmethane 4,4'-diisocyanate (Category Diisocyanate Compounds)	101-68-8
Polymeric diphenylmethane diisocyanate (Category Diisocyanate Compounds)	9016-87-9
di-"isononyl" phthalate	28553-12-0

**335 Extremely Hazardous Substances:** None of the ingredients is listed.

**Proposition 65:**

**Chemicals known to cause cancer:** 28553-12-0 di-"isononyl" phthalate

**Chemicals known to cause reproductive toxicity for males and/or females:** None of the ingredients is listed

**Chemicals known to cause developmental toxicity:** None of the ingredients is listed

**Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

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

**Section 16 – Other Information****Abbreviations and acronyms:**

USDOT: United States Department of Transportation.  
IMDG: International Maritime Code for Dangerous Goods.  
IATA: International Air Transport Association.  
CAS: Chemical Abstracts Service (Division of the American Chemical Society).  
LC50: Lethal concentration, 50 percent.  
LD50: Lethal dose, 50 percent.  
Carc. 2: Carcinogenicity – Category 2  
STOT SE 3: Specific target organ toxicity (single exposure) – Category 3  
STOT RE 2: Specific target organ toxicity (repeated exposure) – Category 2

**SDS prepared by:** Aquafin product safety department.

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**END OF SDS**

(January 28, 2019)