Date prepared: SEPTEMBER 2017
Date revised: JANUARY 2019

SDS No. SDS No. E.1.2.

Section 1 – Product Identification

IDENTITY: *Product Name:* **InjectProECO-CUT**

Product Use Description: **Hydrophobic Polyurethane Injection Grout**

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 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.
H370:	Causes damage to organs.
H373:	May cause damage to organs through prolonged or repeated exposure.

Precautionary Statements:

Prevention:

P102:	Keep out of reach of children.
P202:	Do not handle until all safety precautions have been read and understood.
P260:	Do not breath 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. Protect from sunlight.
P404 + 4055:	Keep container tightly closed. Store locked up.

Disposal:

P501:	Dispose of contents/container to an approved waste disposal site.

Section 3 – Composition / Information on Hazardous Ingredients

Componenents	CAS	% (Weight)
diphenylmethanediisocyanate, isomeres and homologues	9016-87-9	25-50%
4,4'-methylenediphenyl diisocyanate	101-68-8	10-25%
Isocyanic acid, polymethylenepolyphenylene ester, polymer with .alpha.-hydro- .omega. -hydroxypolyoxy(methyl-1,2-ethanediyl)	53862-89-8	10-25%
Reaction mass of 4,4'-methylenediphenyldiisocyanate and o-(p-isocyanatobenzyl) phenylisocyanaat		≤2.5%

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 is suggested.

Inhalation: Supply fresh air and consult a physician if breathing becomes difficult. 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 flush skin with plenty of water. 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: Immediately flush open eyes with plenty of water for at least 15 minutes, lifting upper and lower eyelids occasionally. Remove contact lenses, if present. Seek medical attention if irritation persists.

Section 5 – Fire Fighting Measures

Extinguishing Media: CO_2, 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. Small spills: Absorb with dry chemical absorbent, earth, sand or any other inert material. Allow to stand uncovered for 48 hrs. before closing container. Large spills: Create a dike or trench to contain product. Follow same procedure as for a small spill.

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.

Waste Disposal Method: Must not be disposed of together with household garbage. 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: Ensure good ventilation/exhaustion at the workplace. Prevent formation of aerosols. 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.

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

Section 8 – Exposure Controls / Personal Protection

Exposure Limits:

COMPONENT	CAS NUMBER	OSHA/PEL	ACGIH/TLV
Diphenylmethane 4,4'-diisocyanate	101-68-8	0.02 ppm* (Ceiling) *10 Minutes	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. Wash hands before breaks and at the end of work. of work. Avoid contact with the eyes and skin.

Hand Protection: Glove(s): neoprene.

Eye Protection: Use tightly sealed safety goggles.

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

Physical state: Liquid
Color: Light brown
Odor: Slightly musty
Solubility in water: Insoluble, reacts with water
Boiling point: No data
Flash point: >93°C (>200°F) (closed cup)
Vapor Pressure: <0.1 hPa at 20°C (68°F)
Flammability: No data
Specific Gravity (water = 1) at 25°C: 1.09 -1.11 g/cm^3
Viscosity, (kinematic) at 25°C: 250 - 400 cps
Auto ignition Temperature: Product is not self-igniting
Lower explosion Limit: 0.4 Vol %
Upper explosion Limit: 12.5 Vol %

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

Acute toxicity:

Diphenylmethanediisocyanate, isomeres and homologues	Dermal:	LD50	>9400 mg/kg (rabbit).
	Oral:	LD50	>10000 mg/kg (rat).
4,4'-methylenediphenyl diisocyanate	Dermal:	LD50	>9400 mg/kg (rabbit).
	Oral:	LD50	>2200 mg/kg (mouse).
		LD50	>10000 mg/kg (rat).
Isocyanic acid, polymethylenepolyphenylene ester, polymer with .alpha.-hydro-.omega.-hydroxypolyoxy(methyl-1,2-ethanediyl)	Dermal:	LD50	>9400 mg/kg (rabbit).
	Oral:	LD50	>10000 mg/kg (rat).
Reaction mass of 4,4'-methylenediphenyldiisocyanate and o-(p-isocyanatobenzyl)phenylisocyanaat	Dermal:	LD50	>9400 mg/kg (rabbit).
	Oral:	LD50	>10000 mg/kg (rat).

Carcinogenity:

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

NTP: Not regulated as a carcinogen.

OSHA: Not regulated as a carcinogen.

Section 12 – Ecological Information

Ecotoxicological Information:

MDI: LC50 >1000 mg/L/96h (fish).
EC50 >1000 mg/L/24 h (daphnia magna).

Section 13 – Disposal Considerations

Product waste: Must be disposed of in a manner consistent with federal, state and local regulations.

Packaging waste: Decontaminate and pass to an approved drum recycler or destroy and dispose of in a manner consistent with federal, state and local regulations.

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

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:

Component	CAS NUMBER
Diphenylmethane 4,4'-diisocyanate (Category Diisocyanate Compounds)	101-68-8
Polymeric diphenylmethane diisocyanate (Category Diisocyanate Compounds)	9016-87-9

CERCLA (Comprehensive Environmental Response and Liability Act)

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

National Response Center: Any spill or release to the environment above RQ 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.
EC50:	Median effective concentration.
RQ:	Reportable quantity.
TLV:	Threshold Limit Value
PEL:	Permissible Exposure Limit
REL:	Recommended Exposure Limit

SDS prepared by: Aquafin product safety department.

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END OF SDS (January 24, 2019)