

Date prepared: JANUARY 2017
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SDS No. E.1.1

Section 1 – Product Identification

IDENTITY: *Product Name:* **InjectProECO-CombiGrout**
Chemical Characterization: Diphenylmethanediisocyanate
Product Use Description: PU injection resin - waterproofing

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

Emergency Phone No. (800) 394-1410
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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:

H332 Harmful if inhaled.
H315 Causes skin irritation.
H320 Causes serious eye irritation.
H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H317 May cause an allergic skin reaction.
H351 Suspected of causing cancer.
H335 May cause respiratory irritation.
H373 May cause damage to organs through prolonged or repeated exposure.

Precautionary Statements:

P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P260 Do not breathe dust/fume/gas/mist/vapors/spray.
P285 In case of inadequate ventilation, wear respiratory protection.
P261 Avoid breathing dust/fume/gas/mist/vapors/spray
P280 Wear protective gloves/protective clothing/eye protection/face protection.

P264 Wash thoroughly after handling.

- P271 Use only outdoors or in a well-ventilated area.
P272 Contaminated work clothing must not be allowed out of the workplace.

Prevention:

- P305+351+338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P342+311 If experiencing respiratory symptoms: Call a POISON CENTER/doctor.
P304+340+312 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/doctor if you feel unwell.
P363 Wash contaminated clothing before reuse.

Response:

- P308+313 IF exposed or concerned: Get medical advice/attention.
P333+313 If skin irritation or rash occurs: Get medical advice/attention.
P337+313 If eye irritation persists: Get medical advice/attention.
P314 Get medical advice/attention if you feel unwell.
P303+352+362 IF ON SKIN: Wash with plenty of water. Take off contaminated clothing and wash it before reuse

Storage:

- P403 + P232: Store in a well-ventilated place. Protect from moisture.

Disposal:

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

Section 3 – Composition / Information on Ingredients

Mixture of the substances listed below with nonhazardous additions.

Hazardous Components	CAS No.	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

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 not 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.
- After Inhalation:** Supply fresh air and be sure to call for a doctor. In case of unconsciousness, place patient stably on side position for transportation.
- After Ingestion:** Immediately seek medical attention. Do not induce vomiting without medical advice.
- After Skin Contact:** Immediately wash with water and soap and rinse thoroughly. Seek medical attention if symptoms persist.
- After Eye Contact:** Rinse opened eye for several minutes under running water. If symptoms persist, consult a

doctor.

Section 5 – Fire Fighting Measures

- Extinguishing Media:** Carbon dioxide (CO₂), extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- Special Fire Fighting Procedures:** As in any fire, wear full protective gear and NIOSH-approved self-contained breathing apparatus with full face-piece operated in the pressure demand or other positive pressure mode.

Section 6 – Accidental Release Measures

- Person-related Safety Precautions:** Not required.
- Environmental precautions:** Prevent material from reaching sewage and drainage systems or bodies of water.
- Methods for Cleaning up:** Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust). Dispose contaminated material as waste according to item 13. Ensure adequate ventilation.

Section 7 – Handling and Storage

- Handling:** Ensure good ventilation/exhaustion at the workplace. Prevent formation of aerosols.
- Storage:** Store in tightly closed containers.

Section 8 – Exposure Controls / Personal Protection

- Engineering Controls:** Use with adequate general and local exhaust ventilation.
- Respiratory Protection:** In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.
- Skin Protection:** The glove material has to be impermeable and resistant to the product/ the substance/ the preparation
- Eye Protection:** Wear tightly sealed goggles.
- Work/Hygienic Practices:** Keep away from foodstuffs, beverages and feed. Immediately remove all soiled and contaminated clothing. Wash hands before breaks and at the end of work. Avoid contact with the eyes and skin.
- Exposure Limits:**

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

Section 9 – Physical and Chemical Properties

- Physical State:** Fluid
- Appearance/Color:** Light Brown
- Odor:** Characteristic

Solubility in water: Not miscible or difficult to mix
Boiling Point: Undetermined
Melting Point: Undetermined.
Flash Point: Not applicable.
Auto ignition: Product is not self-igniting.
pH (in water): Reacts with water.
VOC Concentration: 0.0 g/l / 0.00 lb/gl

Section 10 – Stability and Reactivity

Chemical Stability: Stable under normal temperatures and pressures.

Conditions to Avoid: No further relevant information available

Hazardous Decomposition Products: No dangerous decomposition products known.

Incompatibilities: No further relevant information available

Section 11 – Toxicological Information

Primary irritant effect:

On the skin: Irritant to skin and mucous membranes.

On the eye: Irritating effect.

Sensitization: Sensitization possible through inhalation. Sensitization possible through skin contact.

Additional toxicological information:

The product shows the following dangers according to internally approved calculation methods for preparations: Harmful, Irritant

LD/LC50 values that are relevant for classification:

9016-87-9 diphenylmethanediisocyanate, isomers and homologues

Oral LD50 >10000 mg/kg (rat)

Dermal LD50 >9400 mg/kg (rabbit)

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

Oral LD50 2200 mg/kg (mouse) >10000 mg/kg (rat)

Dermal LD50 >9400 mg/kg (rabbit)

53862-89-8 Isocyanic acid, polymethylenepolyphenylene ester, polymer with .alpha.-hydro-.omega.-hydroxypolyoxy(methyl-1,2-ethanediyl)

Oral LD50 >10000 mg/kg (rat)

Dermal LD50 >9400 mg/kg (rabbit)

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

Oral LD50 >10000 mg/kg (rat)

Dermal LD50 >9400 mg/kg (rabbit)

Carcinogenic categories:

IARC (International Agency for Research on Cancer)

9016-87-9 diphenylmethanediisocyanate, isomers and homologues

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

NTP: None of the ingredients is listed.

OSHA-Ca: None of the ingredients is listed.

Section 12 – 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.

Toxicity**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) 53862-89-8

Isocyanic acid, polymethylenepolyphenylene ester, polymer with .alpha.-hydro-.omega.-hydroxypolyoxy(methyl-1,2-ethanediyl)

LC50/96 h >1000 mg/l (fish)

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)

Section 13 – Disposal Considerations

Waste Disposal Method: Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

Container disposal: Disposal must be made according to official regulations.

Section 14 – Transport Information

RCRA Hazard Class: Non-hazardous

USDOT (Domestic Surface) Not regulated

IMDG (Ocean) Hazard Class or Division: Not regulated

IATA/ICAO (Air) Hazard Class or Division: Not regulated

TDG (Canada): Not regulated

UN Number: Not regulated

Section 15 – Regulatory Information

SARA 311/312 (RTK): Hazard Categories: Acute Health: YES
Chronic Health: YES

SARA Section 313 Notification: 9016-87-9 diphenylmethanediisocyanate, isomeres and homologues
101-68-8 4,4'-methylenediphenyl diisocyanate

CERCLA: No CERCLA chemicals exist in this product above reportable concentrations.

TSCA Section 12(b) Export Notification:

9016-87-9 diphenylmethanediisocyanate, isomeres and homologues
101-68-8 4,4'-methylenediphenyl diisocyanate
53862-89-8 Isocyanic acid, polymethylenepolyphenylene ester, polymer with .alpha.-hydro-.omega.-hydroxypolyoxy(methyl-1,2-ethanediyl)

California Proposition 65: None of the ingredients is listed.

EPA (Environmental Protection Agency)

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

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.
ACGIH: American Conference of Governmental Industrial Hygienist
CAS: Chemical Abstracts Service (Division of the American Chemical Society).
VOC: Volatile Organic Compounds (USA, EU)
LC50: Lethal concentration, 50 percent.
LD50: Lethal dose, 50 percent.
PEL: Permissible Exposure Limit
REL: Recommended Exposure Limit

SDS prepared by: Aquafin product safety department.

DISCLAIMER:

We believe the statements, technical information and recommendations contained herein are reliable, but they are given without warranty or guarantee of any kind, expressed or implied, and we assume no responsibility for any loss, damage, or expense, direct or consequential, arising out of their use. Aquafin shall not be responsible for the use of this product in a manner to infringe on any patent or any other intellectual property rights held by others. User is responsible for determining appropriate safety measures and for applying the legislation covering his own activities. We recommend that user makes tests to determine the suitability of a product for its particular purpose prior to use.

END OF SDS

(January 25, 2019)