



AQUAMARK, INC.
AQ 587
SAFETY DATA SHEET

AQUAMARK, INC,
P.O. Box 773
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Supersedes: 10/15/2013

Emergency Telephone Numbers
(440) 564-1227 Aquamark (weekdays)
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SECTION 1. IDENTIFICATION

Product Name: AQ 587
Use: flocculation agent
State of matter: liquid
Color: white to cream
Odor: mineral oil-like
Chemical family: Emulsion based on: polyacrylamide, cationic
Uses advised against: None

SECTION 2. HAZARD(S) IDENTIFICATION

Emergency overview

Caution - Slippery when wet!
Irritating to eyes and respiratory system.
Repeated exposure may cause skin dryness or cracking.
Contains petroleum distillates and prolonged contact with mists may cause skin, eye and respiratory tract irritation. Continued overexposure may cause headache and dizziness. Ingestion may cause lung complications.

Potential health effects

Primary routes of exposure:

Routes of entry for solids and liquids include eye and skin contact, ingestion and inhalation. Routes of entry for gases include inhalation and eye contact. Skin contact may be a route of entry for liquefied gases.

Label elements

Labelling according to paragraph (f) of Regulation 29 CFR 1910.1200:

Hazard symbol(s): None
Signal Word: None
Precautionary statement(s): None
Additional elements: None

SECTION 3. COMPOSITION / INFORMATION ON INGREDIENTS

Identification of the Preparation: Cationic water-soluble polymer in emulsion.

Hazardous components

Distillates (petroleum), hydrotreated light

Concentration /gamme:	20-30%
CAS Number:	64742-47-8
Classification according to paragraph (d) Of Regulation 29 CFR 1910.1200:	Aspiration hazard – May be fatal if swallowed and enters airways.

SECTION 4. FIRST-AID MEASURES

- Inhalation:** Move to fresh air.
- Skin Contact:** Wash off immediately with soap and plenty of water. In case of persistent skin irritation, consult a physician.
- Eye Contact:** Rinse thoroughly with plenty of water, also under the eyelids. In case of persistent eye irritation, consult a physician.
- Ingestion:** The product is not considered toxic based on studies on laboratory animals.

Most important symptoms and effects, both acute and delayed:
None under normal use.

Indication of any immediate medical attention and special treatment needed.
None reasonably foreseeable.

SECTION 5. FIRE-FIGHTING MEASURES

Extinguishing media

Suitable Extinguishing Media: Water, water spray, foam, carbon dioxide (CO₂), dry powder.

Special hazards arising from the substance or mixture

Hazardous Decomposition products: Ammonia. Carbon Oxide (CO_x). Nitrogen oxides (NO_x). Hydrogen chloride. Hydrogen cyanide (hydrocyanic acid) may be produced in the event of combustion in an oxygen deficient atmosphere.

Advice for fire-fighters

- Protective Equipment for Fire-Fighting:** Wear self-contained breathing apparatus and chemical-protective clothing.
- Hazards During Fire-Fighting:** Standard procedure for chemical fires. Cool fire-exposed containers with water. Spills can cause very slippery conditions on floors.
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SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal Precautions: No special precautions required.

Environmental Precautions: Do not contaminate water.

Methods for Cleaning Up

Do not flush with water. Dam up. Soak up with inert absorbent material. If liquid has been spilled in large quantities clean up promptly by scoop or vacuum. Keep in suitable and closed containers for disposal. After cleaning, flush away traces with water.

SECTION 7. HANDLING AND STORAGE

- Handling:** Avoid contact with skin and eyes. When preparing the working solution ensure there is adequate ventilation. When using do not smoke.
- Storage:** Keep in a dry, cool place. (0 - 30°C). Keep away from heat and sources of ignition. Freezing will affect the physical condition and may damage the material.
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SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering Controls: Use local exhaust if misting occurs. Natural ventilation is adequate in absence of mists.

Personal Protection Equipment

- **Respiratory Protection:** In case of insufficient ventilation wear suitable respiratory equipment.

- **Hand Protection:** Rubber gloves.

- **Eye Protection:** Safety glasses with side-shields. Do not wear contact lenses.

- **Skin Protection:** Chemical resistant apron or protective suit if splashing or contact with solution is likely.

Hygiene Measures: Wash hands before breaks and at the end of workday. Handle in accordance with good industrial hygiene and safety practice.

Environmental exposure controls:

Do not allow uncontrolled discharge of product into the environment.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Form:	viscous liquid
Color:	milky
Odour:	aliphatic
Odour Threshold:	No data available
pH:	4-6 @ 5 g/L
Melting point/freezing point:	<5°C
Initial boiling point and boiling range:	> 100°C
Flash Point (°C):	Does not flash
Evaporation rate:	No data available
Flammability (solid, gas):	Not applicable
Upper/lower flammability or explosive limits:	Not expected to create explosive atmospheres
Autoignition Temperature (°C):	Does not ignite
Vapor Pressure (mm Hg):	2.3 kPa @ 20°C
Relative Density:	1.0-1.1
Water Solubility:	Completely miscible
Viscosity (mPa s):	>20.5mm ² /s @ 40°C
Decomposition temperature:	>150°C

SECTION 10. STABILITY AND REACTIVITY

Stability: Product is stable, No hazardous polymerization will occur.

Materials to avoid: Oxidizing agents may cause exothermic reactions.

Hazardous Decomposition Products: Thermal decomposition may produce: hydrogen chloride gas, nitrogen oxides (NO_x), carbon oxides (CO_x).

SECTION 11. TOXICOLOGICAL INFORMATION

Acute Toxicity

Information on the product as supplied:

Acute oral toxicity:	LD50/oral/rat > 5000 mg/kg
Acute dermal toxicity:	LD50/dermal/rat > 5000 mg/kg
Acute inhalation toxicity:	The product is not expected to be toxic by inhalation.
Skin corrosion/irritation:	Non-irritating to skin
Serious eye damage/irritation:	Non-irritating to skin
Respiratory/ skin sensitization	Not sensitizing.
Mutagenicity:	Not mutagenic
Carcinogenicity	Not carcinogenic
Reproductive toxicity:	Not toxic for reproduction
STOT – single exposure	No known effects
STOT – repeated exposure	No known effects
Aspiration hazard:	Due to the viscosity, this product does not present and aspiration hazard.

Relevant information on the hazardous components:

Distillates (petroleum), hydrotreated light

Acute oral toxicity:	LD50/oral/rat > 5000mg/kg (PECD 401)
Acute dermal toxicity:	LD50/dermal/rabbit > 5000mg/kg (OECD 402)
Acute inhalation toxicity:	LC50/inhalation/4 h/rate = 4951 mg/m ³ (OECD 403)
Skin corrosion/irritation:	Not irritating. (OECD 404)
Serious eye damage/irritation	Repeated exposure may cause skin dryness or cracking not irritating. (OECD 405)
Respiratory/skin sensitization:	By analogy with similar products, this product is not expected to be sensitizing. (OECD 406)
Mutagenicity:	Not mutagenic. (OECD 471, 473, 474, 476, 478, 479)
Carcinogenicity:	Carcinogenicity study in rats (OECD 451): Negative
Reproductive toxicity:	By analogy with similar substances, this substance is not expected to be toxic for reproduction. NOAEL/rat = 300ppm (OECD 421)
STOT – single exposure	No known effects
STOT – repeated exposure	NOAEL/oral/rat/90 days >= 3000mg/kg/day (OECD 408) (Based on results obtained from tests on analogous products.).
Aspiration hazard:	May be fatal if swallowed and enters airways.

Poly(oxy-1, 2-ethanediyl), a-tridecyl-w-hydroxy-, branched

Acute oral toxicity:	LD50/oral/rat = 200-300 mg/kg
Acute dermal toxicity:	LD 50/dermal/rabbit> 2000 mg/kg
Acute inhalation toxicity:	No data available
Skin corrosion/irritation:	Not irritating.
Serious eye damage/irritation	Causes serious eye irritation.
Respiratory/skin sensitization:	The results of testing on guinea pigs showed this material to be non-sensitizing.
Mutagenicity:	Not mutagenic.
Carcinogenicity:	Not carcinogenic
Reproductive toxicity:	Two-Generation Reproduction Toxicity (OECD 416) NOEL/Maternal toxicity/rat > 50 mg/kg/day NOEL/Developmental toxicity/rat > 50 mg/kg/day
STOT – single exposure	No known effects
STOT – repeated exposure	NOAEL/oral/rat/600 days >= 50mg/kg/day
Aspiration hazard:	No known effects

SECTION 12. ECOLOGICAL INFORMATION

Toxicity

Information on the product as supplied:

Acute toxicity to fish:	LC50/Fish/96 hours = 10 – 100 mg/L (Estimated)
Acute toxicity to invertebrates:	EC50/Daphnia/48 hours = 10 – 100 mg/L (Estimated)
Acute toxicity to algae:	Algal inhibition testes are not appropriate. The flocculation characteristics of the product interfere directly in the test medium preventing homogenous distribution which invalidates the test.
Chronic toxicity to fish:	No data available.
Chronic toxicity to invertebrates:	No data available.
Toxicity to microorganisms:	No data available.
Effects on terrestrial organisms:	No data available. Readily biodegradable, exposure to soil is unlikely.
Sediment toxicity:	No data available. Readily biodegradable, exposure to sediment is unlikely.

Relevant information on the hazardous components:

Distillates (petroleum), hydrotreated light

Acute toxicity to fish:	LC0/Oncorhynchus mykiss/96 hours > 1000mg/L (OECD 203)
Acute toxicity to invertebrates:	EC0/Daphnia magna/48 hour > 1000 mg/L (OECD 202)
Acute toxicity to algae:	IC0/Pseudokirchneriella subcapitata/ 72 hours > 1000mg/L (OECD 201)
Chronic toxicity to fish:	NOEC/Oncorhynchus mykiss/28 days 1000 mg/L
Chronic toxicity to invertebrates:	NOEC/Daphnia magna/21 days < 1000 mg/L
Toxicity to microorganisms:	EC50/Tetrahymena pyriformis/ 48h > 1000 mg/L
Effects on terrestrial organisms:	No data available.
Sediment toxicity:	No data available. Readily biodegradable, exposure to sediment is unlikely.

Poly(oxy-1, 2-ethanediyl), a-tridecyl-w-hydroxy-, branched

Acute toxicity to fish:	LC50/Cyprinus carpio/ 96 hours = 1 – 10 mg/L (OECD 203)
Acute toxicity to invertebrates:	EC50/Daphnia/48 hour = 1 – 10 mg/L (OECD 202)
Acute toxicity to algae:	IC50/Desmodesmus subspicatus/ 72 hours = 1 – 10 mg/L (OECD 201)
Chronic toxicity to fish:	No data available.
Chronic toxicity to invertebrates:	No data available.
Toxicity to microorganisms:	EC10/activated sludge/17 h > 10000 mg/L (DIN 38412-8)
Effects on terrestrial organisms:	No data available.
Sediment toxicity:	No data available.

Persistence and degradability

Information on the product as supplied:

Degradation:	Readily biodegradable.
Hydrolysis:	At natural pHs (>6) the polymer degrades due to hydrolysis to more than 71% in 28 days. The hydrolysis products are not harmful to aquatic organisms.
Photolysis:	No data available.

Relevant information on the hazardous components:

Distillates (petroleum), hydrotreated light

Degradation:	Readily biodegradable.
Hydrolysis:	Does not hydrolyse.
Photolysis:	No data available.

Poly(oxy-1, 2-ethanediyl), a-tridecyl-w-hydroxy-, branched

Degradation:	Readily biodegradable. > 60% / 28 days (OECD 301 B)
Hydrolysis:	Does not hydrolyse.
Photolysis:	No data available.

Bioaccumulative potential

Information on the product supplied:

The product is not expected to bioaccumulate.

Partition co-efficient (Log Pow):	Not applicable.
Bioconcentration factor (BCF):	No data available.

Relevant information on the hazardous components:

Distillates (petroleum), hydrotreated light

Partition co-efficient (Log Pow):	3-6
Bioconcentration factor (BCF):	No data available.

Poly(oxy-1, 2-ethanediyl), a-tridecyl-w-hydroxy-, branched

Partition co-efficient (Log Pow):	> 3
Bioconcentration factor (BCF):	No data available.

Mobility in soil

Information on the product as supplied:

No data available.

Relevant information on the hazardous components:

Distillates (petroleum), hydrotreated light

Koc: No data available.

Poly(oxy-1, 2-ethanediyl), a-tridecyl-w-hydroxy-, branched

Koc: > 5000

Other adverse effects

None

SECTION 13. DISPOSAL CONSIDERATIONS

Waste from Residues/Unused Products: In accordance with federal, state and local regulations.

Contaminated Packaging: Rinse empty containers with water and use the rinse water to prepare the working solution. Can be landfilled or incinerated, when in compliance with local regulations.

SECTION 14. TRANSPORT INFORMATION

Not regulated by DOT, IATA, IMDG

SECTION 15. REGULATORY INFORMATION

All components of this product are on the TSCA and DSL inventories.

RCRA Status: Not a hazardous waste.

Hazardous Waste Number: Not applicable.

Reportable Quantity (40 CFR 302): Not applicable.

Threshold Planning Quantity (40 CFR 355): Not applicable.

California Proposition 65 Information: *The following statement is made in order to comply with the California Safe Drinking Water and Toxic Enforcement Act of 1986: This product contains a chemical(s) known to the State of California to cause cancer: residual Acrylamide.*

SECTION 16. OTHER INFORMATION

HMIS & NFPA Ratings

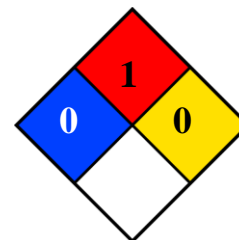
NFPA Hazard codes:

Health: HMIS 0 NFPA 0

Flammability: HMIS 1 NFPA 1

Reactivity: HMIS 0 NFPA 0

Personal Protection/Special: B



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