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MATERIAL SAFETY DATA SHEET

Aqua Kinetics, Inc.  
P. O. Box 249  
Irwin, PA 15642

Phone Number: 724-864-9214

I. GENERAL

Trade Name: Unifloc 155-P  
Effective Date: November 1, 2011

Chemical Family: Copolymer of quaternary acrylate salt and acrylamide.

Description: White, free-flowing granular powder with little or no odor. May irritate eyes and/or respiratory tract.

Precautionary Measures: Do not get in eyes, on skin, on clothing. Wash thoroughly after handling. Avoid prolonged or repeated inhalation of dust or skin contact. Slip hazard when wet.

Intended Use or Product Type: Flocculant.

HMIS RATING (NPCA):

Health (0) Flammability (1) Reactivity (0) Personal Protection (\*)

Personal protection rated by user. Dependent on use.

Degree of Hazard 4 = SEVERE 3 = SERIOUS 2 = MODERATE  
1 = SLIGHT 0 = MINIMAL

II. HAZARDOUS INGREDIENTS

INGREDIENT	CAS #	PPM	LIMITS IN AIR mg/cu. meter
Adipic Acid	124-09	ND	ND
Copolymer Acrylamide	69418-26-4	ND	ND
Urea			

ND = Not determined or no data.

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## III. PHYSICAL PROPERTIES

Physical Form: Granular powder.  
Color: White.  
Odor: Nearly odorless.  
Physical State: Solid.  
Boiling Point (degrees F): Not applicable.  
Vapor Pressure (mm. Of Hg): Not applicable.  
Vapor Density (air =1): Not applicable.  
Solubility in Water: Soluble – solubility limited by viscosity.  
Evaporation Rate (ethyl ether = 1): Not applicable.  
Specific Gravity (water =1): 0.75  
Percent Volatile (by volume): Not applicable.  
PH: 8.0 (1 % solution).

## IV. FIRE AND EXPLOSION DATA

Flash Point – Flammable Limits: Not applicable.  
Autoignition: Not evaluated.

Sensitivity to Static Discharge: Dust in sufficient concentration may result in an explosive mixture in air.

Fire Fighting Instruction: Combustion by-product includes carbon monoxide and carbon dioxide. Wetted product presents a slip hazard.

Extinguishing Media: Carbon dioxide, dry chemical or foam.

Special Fire-Fighting Procedures: No special procedures. However, wetted product presents a slip hazard. Pedestrian and vehicular traffic must proceed with caution where wet product may exist.

Unusual Fire and Explosion Hazards: Dust in sufficient concentration can result in an explosive mixture in air. Handle to minimize dusting, and eliminate open flame and other sources of ignition.

Extinguishing Media to Avoid: water may create a slip hazard with product.

Hazardous Combustion of Products: Oxides of carbon and nitrogen.

Dust Explosivity: Dust in sufficient concentration may result in an explosive mixture in air.

ERG Guidebook Information: No ERG Guide cited. Handle as combustible material.  
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## V. STABILITY AND REACTIVITY DATA

Conditions to Avoid: Avoid wet and humid conditions.

Stability: Stable.

Incompatibility (materials to avoid): Strong oxidants such as liquid chlorine, enriched gaseous or liquid oxygen, and sodium or calcium hypochlorite.

Hazardous Decomposition Products: Thermal decomposition or combustion may produce oxides of carbon and nitrogen, various hydrocarbons, ammonia and/or hydrogen chloride vapor. Vapor may be irritating or harmful.

Hazardous Polymerization: Will not occur.

## VI. HEALTH HAZARD DATA

Nature of Principal Hazard(s): Eye irritant.

Target Organ(s): Eyes, lungs.

Signs, Symptoms, and Effects of Exposure: Contact with the eye may produce irritation and/or redness. Inhaled dust may cause some respiratory irritation.

Carcinogenicity: Not listed as carcinogen by IARC, NTP, OSHA or ACGIH.

Acute Exposure: May cause eye irritation. May irritate respiratory tract.

Chronic: Not known.

Overexposure Effects: Not known.

Medical Conditions Aggravated by Exposure: Existing respiratory conditions.

Exposure Limits (as particulates not otherwise regulated): The OSHA 8-hour TWA for total dust is 15mg/cu-meter (5 mg/cu-meter for the respirable fraction). The ACGIH TLV-TWA is 10 mg/cu-meter.

Safety Precautions: Do not get in eyes, on skin, or on clothing. Wash thoroughly after handling. Avoid prolonged or repeated inhalation of dust. Avoid prolonged or repeated skin contact. Caution – slip hazard – see Sections IV and/or VII.

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(HEALTH HAZARD DATA CONT')

First Aid:

Eye Contact: Immediately flush eyes with plenty of water for at least 15 minutes. Call a physician.

Ingestion: Do not give an emetic unless directed by a physician. Never give anything by mouth to an unconscious person.

Skin Contact: Remove contaminated clothing and launder before reuse. Wash effected area with soap and water.

Inhalation: Remove to fresh air.

VII.

ENVIRONMENTAL DATA

Spill or Leak Procedures: Product becomes slippery and difficult to handle when wet; spills are best handled while still dry. Sweep up and collect dry product. Absorb wet product with vermiculite or other inert material. Then water wash area to waste treatment to eliminate slip hazard.

Waste Disposal Method: Disposal must be arranged in accordance with local, state and federal regulations. This material, when unadulterated, is not a RCRA regulated hazardous waste. However, local disposal regulations will often apply. Care must be taken to prevent environmental contamination from the disposal of material, residues and containers.

This product, or a similar product, is toxic to fish. Prevent spills from entering drains or waterways.

VIII. EXPOSURE CONTROLS/PERSONAL PROTECTION

Respiratory Protection (specify type): Use a NIOSH approved dust respirator if exposure exceeds TLV. Follow the ANSI Z88.2 standard.

Ventilation: Provide mechanical ventilation to prevent dust concentrations, and to reduce potential exposure.

Eye Protection: Goggles ANSI Z87.1 standard; safety glasses alone do not protect from dust.

Protective Gloves: Not normally required.

Other Equipment: Provide eyewash station(s). Select additional protective equipment (eg. apron, face shield, etc.), depending on conditions of use.

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## IX. HANDLING AND STORAGE

Shelf Life: 48 months.

Precautions: Good personal hygiene practices can reduce potential effects. Wash with soap and water following any contact with this product, as well as before breaks and meals. Shower and change clothing at end of work shift. If clothing becomes contaminated, remove and launder or dry-clean before reuse.

Storage Information: Store in cool dry location.

## X. REGULATORY INFORMATION

Proper Shipping Name: NOT A DOT/IMO HAZARDOUS MATERIAL.

ID Number: Not applicable.

DOT Emergency Guide (ERG): # 31

The following components are defined as toxic chemicals subject to reporting requirements of SARA Section 313 and of 40 CFR 372: None are 313 Toxic chemicals.

Clean Air Act – Ozone Depleting Substances (ODS): This product neither contains, nor was manufactured with, a Class I or Class II ozone depleting substance (ODS), as defined by the U. S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App. A+B).

Clean Water Act – Priority Pollutants (PP): This product does not contain any priority pollutants listed under the U. S. Clean Water Act Section 307 (2)(1) Priority Pollutant list (40 CFR 401.15).

Occupational Safety and Health Act (OSHA): This product is considered to be a hazardous chemical under the OSHA Hazard Communication Standard (29 CFR 1910.1200).

SARA Title III: Section 302 –This product does not contain any chemical regulated under Section 302 (40 CFR 355) as extremely hazardous substances.

Pennsylvania Right-to-Know: The following is required composition information.

Copolymer Acrylamide: DMAEA Q.(MeCl): CASRN: 69418-26-4

Not on PA Hazardous Substance List

Water: CASRN: 7732-18-5 Not on PA Hazardous Substance list.

Adipic Acid: CASRN: 24-04-9 Environmental Hazardous Substance.

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(REGULATORY INFORMATION CONT')

SARA Title III: Section 304- CERCLA: This product contains the following chemicals regulated under Section 304 (40 CFR 302) as hazardous substance(s) for emergency release notification (CERCLA List):

Chemical Name: ADIPID ACID CASRN: 124-04-9  
Percent in Composition: < 5 % by weight. Component RQ: 5000

SARA Title III: Section 311/312 – Hazard Communication Standard (HCS): Acute health hazard.

TSCA: Components appear on the TSCA inventory.

## XI. TOXICOLOGICAL INFORMATION

Acute Oral Toxicity: Low oral toxicity. By analogy to similar materials, the acute LD50 (rat) is expected to be >2000 mg/kg.

Carcinogenicity: Not listed as a carcinogen by IARC, NTP, OSHA, or ACGIH.

Reproductive Toxicity: No data for product. No effects anticipated.

Teratogenicity: No data for product. No effects anticipated. Mutagenicity: No data for product. No effects anticipated.

Toxicologically Synergistic Products: None

## XII. ECOLOGICAL INFORMATION

This product is rated NSF potable up to 1 mg/l.

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