

Material Safety Data Sheet

SECTION 1 – CHEMICAL PRODUCT AND COMPANY INFORMATION

Product Name: VA Flocc 4864B

Chemical Family: A Cationic Polyacrylamide
Copolymer in Water-in-oil Emulsion

Manufacturer's Name: Siemens Industry, Inc. - Water Technologies Business Unit

Address: 2650 Tallevast Road, Sarasota, FL 34243

Product/Technical Information Phone Number: 1.941.355.2971

Medical/Handling Emergency Phone Number: CHEMTREC 1.800.424.9300
24 hours a day

Transportation Emergency Phone Number: CHEMTREC 1.800.424.9300
24 hours a day

Issue Date/Revision: May 2006

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SECTION 2 – COMPOSITION INFORMATION

<u>Chemical Name</u>	<u>Percent by Weight</u>	<u>CAS#</u>
Cationic Polyacrylamide Copolymer	Proprietary	69418-26-4
Petroleum Distillate	Proprietary	64742-47-8
Nonionic Surfactant	Proprietary	Proprietary

SECTION 3 – HAZARDS IDENTIFICATION

Appearance & Odor: Semi-translucent to opaque, off-white liquid. Slight hydrocarbon odor.

Emergency Overview: Contact with water may form a highly viscous and stringy material which is extremely slippery, difficult to clean up, and can clog small drains. Causes eye irritation and may cause skin irritation.

Fire & Explosion Hazards: No unusual hazards.

Primary Route(s) of Exposure: Skin contact, mist inhalation.

Inhalation – Acute Effects: Irritating to eyes and respiratory tract in high concentrations. Repeated and prolonged overexposure to oil mists may result in droplet deposition, oil granuloma formation, inflammation and increased incidence of infection.

Skin Contact – Acute Effects: Low order of toxicity. Irritating.

Eye Contact – Acute Effects: Severely irritating and may burn the eyes. If not removed promptly, will injure eye tissue, which may result in permanent damage.

Ingestion – Acute Effects: Low order of toxicity. May result in gastrointestinal irritation, nausea and diarrhea. Small amounts of the liquid aspirated into the respiratory system during ingestion, or from vomiting, may cause bronchiopneumonia or pulmonary edema.

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SECTION 4 – FIRST AID MEASURES

Inhalation First Aid: Remove affected person to fresh air and provide oxygen if breathing is difficult. Give artificial respiration ONLY if breathing has stopped and give CPR ONLY if there is no breathing and no pulse. Obtain medical attention.

Skin Contact First Aid: Immediately remove clothing from affected area and wash skin for 15 minutes with flowing water.

Eye Contact First Aid: Immediately irrigate eyes with flowing water continuously for 15 minutes while holding eyes open. Contacts should be removed before or during flushing. Obtain immediate medical attention.

Ingestion First Aid: DO NOT induce vomiting. If spontaneous vomiting occurs, have affected person lean forward with head down to maintain the breathing passage open. Obtain prompt medical attention.

SECTION 5 – FIRE FIGHTING MEASURES

Flash Point/Method: >200°F Pensky-Martens CC

Auto Ignition Temperature: Not available.

Upper/Lower Explosion Limits: Not available.

Extinguishing Media: Use foam, dry chemical, or water spray to extinguish fire. Use water to cool fire-exposed surfaces and to protect personnel.

Fire Fighting Procedures: As in any fire, wear MSHA/NIOSH approved self-contained breathing apparatus pressure-demand and full protective gear.

Fire & Explosion Hazards: Contact with water may form a highly viscous and stringy material which is extremely slippery, difficult to clean up, and can clog small drains.

Hazardous Products of Combustion: May liberate CO, CO₂, oxides of nitrogen, and black smoke if involved in a fire.

NFPA Ratings: HEALTH - 2 FLAMMABILITY - 1 REACTIVITY - 0

SECTION 6 – ACCIDENTAL RELEASE MEASURES

Spilled product should be scooped up as much as possible and the remaining thin layer absorbed with a solid material such as a sweeping compound. Washing the area should only be attempted after most of the polymer has been removed. Do not place spill materials back in their original container.

DO NOT DUMP INTO ANY SEWERS, ON THE GROUND OR INTO ANY BODY OF WATER. All disposal methods must be in compliance with all Federal, State, Local and Provincial laws and regulations. Regulations may vary in different locations. Waste characterizations and compliance with applicable laws are the responsibility solely of the waste generator.

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SECTION 7 – HANDLING AND STORAGE

Keep container closed. Open and handle containers with care. Store in a cool, well ventilated place away from incompatible materials. Do NOT pressurize, cut, heat, or weld containers.

Handling: Mix well before using. Upon standing, product may stratify (as noted by a clear upper layer of oil). Mild agitation will restore uniformity.

Storage: Do not use aluminum, copper, or mild steel tanks, pumps or piping with this product. Store in glass, stainless steel, plastic or epoxy lined containers.

Storage Pressure: Atmospheric.

Storage Temperature: Keep from freezing.

SECTION 8 –PERSONAL PROTECTION/ EXPOSURE CONTROL

Respiratory Protection: None required under normal use conditions. If use conditions generate mists or vapors, wear a, NIOSH approved respirator with organic vapor cartridges.

Skin Protection: Wear chemical resistant gloves and long sleeves.

Eye Protection: Chemical goggles

Ventilation Protection: The use of mechanical dilution ventilation is recommended whenever this product is used in a confined space, is heated above ambient temperatures, or is agitated.

Other Protection: Safety showers, with quick opening valves which stay open, and eye wash fountains, or other means of washing the eyes with a gentle flow of cool to tepid water, shall be readily available in all areas where this material is handled or stored. Water should be supplied through insulated and heat-traced lines to prevent freeze-ups in cold weather.

Exposure Limits: Exposure limits have not been established for this product. However, for the petroleum distillate component:

Supplier OEL 165 ppm (1200 mg/m³) TWA

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

Appearance & Odor: Semi-translucent to opaque, off-white liquid. Slight hydrocarbon odor.

Boiling Point: ~212°F (initial)

Freezing Point: < 32°F

Specific Gravity: 1.01 to 1.05 at 80°F

Evaporation Rate: <1 (n-Butyl Acetate=1)

Viscosity: 400 to 1200 cP at 80°F (Brookfield RVT 3/50)

Solubility in Water: Soluble with vigorous agitation. Contact with water at a product content greater than approximately 2% (without vigorous agitation) results in a highly viscous and stringy material which is extremely slippery, difficult to clean up, and can clog small drains.

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SECTION 10 – STABILITY AND REACTIVITY

Stability: Stable.

Incompatibilities: Strong oxidizing agents.

Hazardous Polymerization: Will not occur.

Hazardous Decomposition Products: May liberate CO, CO₂, oxides of nitrogen, and black smoke when burned.

SECTION 11 – TOXICOLOGICAL INFORMATION

Potential Eye Effects: A primary eye irritation study in rabbits was conducted (using EPA guidelines No. 81-4) using a test material similar to that represented by this MSDS. The results indicated the test material was rated as moderately irritating. “Positive” corneal involvement persisted through Day 21; therefore, the test material was assigned to Toxicity Category I.

Potential Effects of Skin Contact: A primary dermal irritation study in rabbits was conducted (using EPA guidelines No. 81-5) using a test material similar to that represented by this MSDS. Test results indicated a primary irritation index of 4.1 out of a possible 8.0, or a descriptive rating of moderately irritating. Based on 72 hour score only, the test material was assigned to Toxicity Category II (severe irritation). This product contains a surfactant which may result in the development of inflammatory changes in the lung, based on studies with rabbits in which the undiluted surfactant was kept in sustained occluded contact with the rabbit’s skin.

Carcinogenicity/Mutagenicity: This product (or any component of 0.1% or greater) is not listed by the NTP, IARC, OSHA, or EPA as a carcinogen.

Target Organs: At high oral doses, the petroleum distillate used in this product caused reversible damage to the liver and kidney of male rats. These effects are not relevant to humans at occupational levels of exposure.

SECTION 12 – ECOLOGICAL INFORMATION

No information available.

SECTION 13 – DISPOSAL CONSIDERATIONS

Material that cannot be used or chemically reprocessed and empty containers should be disposed of in accordance with all applicable regulations. Product containers should be thoroughly emptied before disposal. Generators of waste material are required to evaluate all waste for compliance with RCRA and any local disposal procedures and regulations.

NOTE: State and local regulations may be more stringent than federal regulations.

Empty Containers: Empty containers retain product residue including liquid and vapor. Although the residue is a low fire hazard, it can burn upon heating to temperatures at or above the flashpoint and can be dangerous. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose empty containers to heat, flames, sparks, static electricity, or other sources of ignition as they may explode and cause injury or death. Empty drums should be completely drained and returned to a drum reconditioner or properly disposed.

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SECTION 14 – TRANSPORTATION INFORMATION

DOT Shipping Description: Not regulated.

SECTION 15 – REGULATORY INFORMATION

OSHA Hazard Communication: Health hazard

CERCLA Hazardous Substance: No

SARA Hazard Categories:

Acute Health Hazard: Yes

Chronic Health Hazard: No

Fire Hazard: No

Pressure Release Hazard: No

Reactivity Hazard: No

Clean Water Act: This product is considered an oil under Section 311 of the Clean Water Act (40 CFR 110) and the Oil Pollution Act of 1990. Discharges that produce a visible sheen on surface waters or on waterways or sewers that lead to surface water must be reported to the National Response Center, 800-424-8802.

SECTION 16 – OTHER INFORMATION

Disclaimer: The information contained herein is based on data considered accurate. However, no warranty is expressed or implied regarding the accuracy of these data or the results to be obtained from the user thereof. It is the buyer's responsibility to ensure that its activities comply with federal, state, provincial and local laws.

Revision Indicator: Legal Entity name change 04/01/11