

## Material Safety Data Sheet

### SECTION 1 – CHEMICAL PRODUCT AND COMPANY INFORMATION

**Product Name:** Aik AQUIT™ 25

**Chemical Family:** Alkaline Earth Hydroxide with  
Biological Inhibitor

**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:** April 2010

**Revision Number / Date:** Rev 3 April 2011

### SECTION 2 – COMPOSITION INFORMATION

<u>Chemical Name</u>	<u>Percent by Weight</u>	<u>CAS#</u>
Calcium Hydroxide	20-25	1305-62-0
Proprietary Component	<0.5	
Silicon Dioxide	<2	14808-60-7
Other Inert Ingredients	<4	
Water	Balance	7732-18-5

### SECTION 3 – HAZARDS IDENTIFICATION

**Appearance & Odor:** White to pink, low viscosity, odorless liquid.

**Emergency Overview:** This material is an irritant and may burn the skin and eyes. Spills of this material will make the floor slippery. Do not allow this material to evaporate to dryness because the residue contains small quantities of crystalline silica, a respiratory cancer hazard if airborne.

**Fire & Explosion Hazards:** This material is not flammable.

**Primary Route(s) of Exposure:** Skin and eye contact, vapor and mist inhalation.

**Inhalation – Acute Effects:** This material may cause severe irritation of the respiratory system in mist or dry form. Long term exposure may cause permanent damage.

**Skin Contact – Acute Effects:** This material may irritate the skin.

**Eye Contact – Acute Effects:** This material may cause severe irritation of the eyes including permanent damage.

**Ingestion – Acute Effects:** Ingestion may cause severe irritation or burning of the gastrointestinal system. Ingestion of large quantities may be fatal. Ingestion may cause a laxative effect and produce greenish or bluish urine.

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### SECTION 4 – FIRST AID MEASURES

**Inhalation First Aid:** Remove affected person to fresh air. Give artificial respiration ONLY if breathing has stopped. Obtain medical attention if individual shows symptoms of exposure.

**Skin Contact First Aid:** Immediately remove clothing from affected area and wash skin with flowing water for 15 minutes. Clothing must be washed before reuse. Obtain medical attention if irritation occurs.

**Eye Contact First Aid:** Immediately irrigate eyes with flowing water for 15-20 minutes while holding eye lids open. Contacts should be removed before or during flushing. Obtain immediate medical attention.

**Ingestion First Aid:** If victim is alert and not convulsing rinse mouth with water and give water to drink. DO NOT induce vomiting. If spontaneous vomiting occurs, have affected person lean forward with head down to maintain an open breathing passage. Obtain medical attention immediately.

**Medical Conditions Aggravated:** Contact may aggravate disorders of the eyes, skin, gastrointestinal, and respiratory system.

**Note to Physician:** Treat symptomatically.

### SECTION 5 – FIRE FIGHTING MEASURES

**Flash Point/Method:** Not applicable.

**Auto Ignition Temperature:** Not applicable.

**Upper/Lower Explosion Limits:** Not applicable.

**Extinguishing Media:** Use extinguishing media suitable for surrounding fire.

**Fire Fighting Procedures:** As with any fire, fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Use water spray to keep fire-exposed containers cool.

**Fire & Explosion Hazards:** This product becomes a fire or explosion hazard if allowed to dry. May be combustible at high temperatures or if the liquid is allowed to evaporate. Contact with acids may generate enough heat to ignite nearby combustible materials. Contact with metals such as aluminum, tin, or zinc will generate heat and liberate flammable hydrogen gas.

**Hazardous Products of Decomposition and/or Combustion:** If this product evaporates to dryness, the residue will contain small quantities of crystalline silica, a respiratory cancer hazard if allowed to become airborne. Fires involving the Proprietary Component may produce toxic fumes of carbon monoxide and carbon dioxide.

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

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### SECTION 6 – ACCIDENTAL RELEASE MEASURES

Wear appropriate personal protective equipment (see Section 8). Stop leak if safe to do so without risk. Do not use water on bulk material spills. Do not clean up with compressed air. Avoid generation of dust. Store collected materials in sealed plastic or non-aluminum metal containers. Residue on surfaces may be water washed.

If this material evaporates to dryness, minimize dust generation during clean up and prevent bulk release to sewers or waterways. Residual amounts of material can be flushed with large amounts of water. Equipment can be washed with either a mild vinegar and water solution or detergent and 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.

### SECTION 7 – HANDLING AND STORAGE

**Handling:** Keep in plastic or non-aluminum metal containers. Protect containers from physical damage. Avoid direct skin contact with the material. Wash thoroughly after handling, immediately remove, and dispose of any spillage. Immediately rinse contaminated clothing thoroughly with water. Rinse containers with water only.

**Storage:** Store at ambient temperatures apart from combustible and other readily oxidizable materials, food, beverages, and excessive heat. Do not store near acids or other incompatible materials. Do not store or ship in aluminum containers.

Particulates may settle out after extended storage times. In this event, re-suspend the particulates before use by agitating the material.

### SECTION 8 – PERSONAL PROTECTION/ EXPOSURE CONTROL

**Respiratory Protection:** None required under normal use conditions. If use conditions generate mists, wear a NIOSH approved respirator with ammonia gas cartridges.

**Skin Protection:** Wear protective gloves and other protective clothing as appropriate to prevent skin contact.

**Eye Protection:** Wear safety glasses with side shields for normal operating conditions. Wear chemical safety goggles if use conditions generate splashes, mists, or sprays. Contact lens should not be worn when working with this product.

**Ventilation Protection:** General exhaust ventilation is usually adequate under normal operating conditions. However, if use conditions generate mists or sprays, use local exhaust ventilation.

**Other Protection:** Recommend means of washing the eyes with a gentle flow of cool to tepid water 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. Employees should wash their hands and face before eating, drinking, or using tobacco products. Educate and train employees on the safe use and handling of this product.

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**Exposure Limits:** Occupational exposure limits have not been established for this material. However, for calcium hydroxide and crystalline silica, two components of this material:

### Exposure Limits, mg / m<sup>3</sup>

<u>Component</u>	<u>OSHA PEL</u>	<u>OSHA STEL</u>	<u>ACGIH TLV</u>	<u>ACGIH STEL</u>
Calcium hydroxide	15 (total) 5 (resp)	5	5	5
Crystalline silica	10 / % SiO <sub>2</sub> + 2 (resp)	---	0.025	---

Proprietary Component: No PEL or TLV listed.

## SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

**Appearance & Odor:** White to pink, low viscosity, odorless liquid.

**Boiling Point:** 100° C

**pH:** 12.4

**Specific Gravity:** 1.1 – 1.2

**Solubility in Water:** < 1% of non water ingredients

## SECTION 10 – STABILITY AND REACTIVITY

**Stability:** Stable.

**Incompatibilities:** This material should not be mixed or stored with the following materials due to the potential for vigorous reaction and release of heat: acids, reactive fluorinated or brominated compounds, powdered metals, acid anhydrides, nitro-organic compounds, reactive phosphorous compounds, and halogenated compounds.

**Hazardous Polymerization:** Will not occur.

**Hazardous Decomposition Products:** If this material evaporates to dryness, the residue will contain small quantities of crystalline silica, a respiratory cancer hazard if allowed to become airborne. If heated above 270° C (518° F) thermal decomposition may produce potentially toxic and/or hazardous gases.

**Conditions to Avoid:** Avoid exposure to extreme temperatures and contact with incompatible materials.

## SECTION 11 – TOXICOLOGICAL INFORMATION

**Toxicological Data:** There are no toxicological data available for this material. However, for the components of this material:

Calcium hydroxide:

Oral LD 50 (rat) = 7340 mg / kg.

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Eye contact (rabbit) = severe irritation at 500 mg dose for 24 hr

Proprietary Component:

Oral LD 50 (rat) = >5000 mg / kg.

Eye irritation (rabbit) = mild irritation; all animals free of irritation in 72 hours.

**Carcinogenicity / Mutagenicity:** No carcinogenic or mutagenic properties of this product are known. However, crystalline silica, a minor component of this product, is classified by IARC as a Group I carcinogen when respirable. Proprietary Component has been identified as a carcinogen in rats and mice.

**Reproductive Effects:** No reproductive effects of this product are known.

**Neurotoxicity:** No neurotoxic effects of this product are known.

**Other Effects:** None known.

### SECTION 12 – ECOLOGICAL INFORMATION

**Toxicological Information:** This material exhibits a high pH so high concentrations would be expected to produce significant ecotoxicity upon exposure to aquatic organisms and aquatic systems.

Proprietary Component: Aquatic Toxicity LC30: 5,300 mg/l (Pimephales promelas)

### SECTION 13 – DISPOSAL CONSIDERATIONS

This product contains no hazardous substances as listed in 40 CFR 302.

Material that cannot be used, or reprocessed for use, 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.

### SECTION 14 – TRANSPORTATION INFORMATION

**Domestic Transportation:** This material is not a hazardous material for transportation purposes and is not regulated by US DOT when shipped domestically.

**International Transportation:** This material is not a dangerous good for transportation purposes and is not regulated when shipped according to ICAO, IATA, or IMDG requirements.

### SECTION 15 – REGULATORY INFORMATION

**OSHA Hazard Communication:** Health hazard

**OSHA Process Safety Management:** no

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### U.S. Federal Regulations:

**CERCLA Hazardous Substance:** no

**SARA Hazard Categories:**

**Acute health:** yes

**Chronic health:** no

**Fire:** no

**Pressure release:** no

**Reactivity:** no

**California Proposition 65:** Proprietary Component and Crystalline silica, trace components of this material, are listed on the Proposition 65 list.

### 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