SIEMENS

Siemens Industry, Inc.
Water Technologies Business Unit

Material Safety Data Sheet

SECTION 1 – CHEMICAL PRODUCT AND COMPANY INFORMATION

Product Name: Calcium Nitrate SB Solution **Chemical Family:** Inorganic Salt Solution

Manufacturer's Name: Siemens Industry, Inc. - Water Technologies Business Unit
Address: 2650 Tallevast Road, Sarasota, FL 34243
Product/Technical Information Phone Number: 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: December 2000
Revision Number / Date: Rev 4 August 2011

SECTION 2 – COMPOSITION INFORMATION

Chemical Name	Percent by Weight	CAS#
Ammonium Calcium Nitrate Double Salt	43-47	15245-12-2
Ammonium Nitrate	17-18	6484-52-2
Water	Balance	7732-18-5

SECTION 3 – HAZARDS IDENTIFICATION

Appearance & Odor: Clear, colorless, odorless solution

Emergency Overview: Spills may be slippery. Do not allow spilled material to evaporate to dryness.

Fire & Explosion Hazards: This material is not flammable.

Primary Route(s) of Exposure: Skin and eye contact, ingestion and inhalation.

Inhalation — Acute Effects: Spray or mist may irritate respiratory tract.

Skin Contact — Acute Effects: May irritate the skin.

Eye Contact — Acute Effects: May irritate the eyes.

Ingestion — Acute Effects: Ingestion of large amounts may cause violent gastroenteritis.

SECTION 4 – FIRST AID MEASURES

Inhalation First Aid: Remove affected person from area 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 and soap. Clothing must be washed before reuse. DO NOT instruct person to neutralize affected skin area. Obtain medical attention if irritation occurs.

Eye Contact First Aid: Immediately irrigate eyes with flowing water 15-20 minutes while holding eyes open. Contacts should be removed before or during flushing. DO NOT instruct person to neutralize. Obtain medical attention if irritation occurs.

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 breathing passage. Obtain medical attention.

Medical Conditions Aggravated: None known.

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 an extinguishing media suitable for the 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.

Fire & Explosion Hazards: May be combustible at high temperature.

Hazardous Products of Decomposition and/or Combustion: Decomposition may produce nitrogen oxides, ammonia, or metallic oxides.

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

SECTION 6 – ACCIDENTAL RELEASE MEASURES

Mop up and containerize for subsequent recycling or disposal. Triple rinse empty containers with water prior to reconditioning.

DO NOT DUMP 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.

SECTION 7 – HANDLING AND STORAGE

Handling: 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 in dry place at ambient temperatures apart from combustible and other readily oxidizable materials, food, beverage, and excessive heat.

General Comments: Rinse empty containers with water only.

SECTION 8 –PERSONAL PROTECTION/ EXPOSURE CONTROL

Respiratory Protection: None required under normal use conditions. If use conditions generate mists, wear a respirator with acid 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. Wear chemical goggles if splashing is likely.

Ventilation Protection: Adequate general and mechanical exhaust ventilation.

Other Protection: Recommend means of washing the eyes with a gentle flow of cool to tepid tap water be readily available in all areas where this material is handled or stored. 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.

Exposure Limits: No occupational exposure limits have been established for this material.

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

Appearance & Odor:

Boiling Point: 220˚ F

Melting Point: Not applicable

Specific Gravity: 1.48 - 1.52 at 20˚ C

Solubility in Water: Complete

Density (lbs/gal): 12.3 - 12.6 at 68˚ F

pH: 4-8

Volatile Percentage: (water) 35 - 40

Auto Ignition Temperature: None

SECTION 10 – STABILITY AND REACTIVITY

Stability: This material is stable under normal use conditions

Incompatibilities: This product is incompatible with organic materials, reducing agents, chlorine or hypochlorite products, and caustic products.

Polymerization: Hazardous polymerization will not occur.

Decomposition: Decomposition may produce nitrogen oxides, ammonia.

Conditions to Avoid: Avoid evaporation to dryness. If allowed to dry, product residue is incompatible with flammable organic materials, reducing agents, and chlorine or hypochlorite products. This product is incompatible with caustic materials.

SECTION 11 – TOXICOLOGICAL INFORMATION

Toxicological Data: Oral LD50 (rat) >2000 mg/kg
Acute Toxicity Estimate (ATE) = 3900 mg / kg

Carcinogenicity/Mutagenicity: No carcinogenic or mutagenic properties of this material are known.

Reproductive Effects: No reproductive effects of this material are known.

Neurotoxicity: No neurotoxic effects of this material are known.

Other Effects: None known.

Target Organs: Target organs include the skin and eyes.

SECTION 12 – ECOLOGICAL INFORMATION

Toxicological Data: California Title 22 Acute Toxicity Screening Protocol:
Fish bioassay (96 hr):

Test concentration, ppm	Survival, %
0	100
250	95
750	100

The products of biodegradation are non-toxic. This product does not show any bioaccumulation phenomena.

SECTION 13 – DISPOSAL CONSIDERATIONS

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

US Domestic:
This product is not hazardous for transportation purposes and is not regulated by US DOT when shipped domestically.

International:
This product is not a dangerous good for transportation purposes and is not regulated when shipped according to ICAO, IATA, or IMDG regulations.

SECTION 15 – REGULATORY INFORMATION

OSHA Hazard Communication: Not regulated

U.S. Federal Regulations:
TSCA 8 (b) Inventory: Included
SARA 302/304/311/312 Extremely Hazardous Substances: Not listed.
SARA 302/304 Emergency Planning and Notification: Not listed.
SARA 302/304/311/312 Hazardous Chemicals: Not listed.
SARA 313: Not Listed
Clean Water Act 301: Not listed.
Clean Water Act 311: Not listed.
Clean Air Act 112 Accidental Release Prevention: Not listed.

State Regulations:
Not listed.

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 hereof. It is the buyer's responsibility to ensure that its activities comply with federal, state, provincial, and local laws.

Revision Indicator: Sections 2 and 9
Legal Entity name change