AG-GEL™ Project at Iron Mountain Mines

Advanced Technology for a Challenging World
NATURE'S AG-GEL™

TO THE WORLD OF AGRICULTURE:

WELCOME TO NATURE'S AG-GEL™ MINERAL PLANT FOOD. THIS NEW AGRICULTURAL AND HOME GARDEN PRODUCT IS MADE FROM UNLIMITED NATURAL RESOURCES WITHOUT CHEMICALS. THE PROPRIETARY TECHNOLOGY IS REVOLUTIONARY AND UNIQUE. AFTER 3 1/2 YEARS OF DEVELOPMENT AND EXTENSIVE FIELD TESTING, NATURE'S AG-GEL™ IS NOW AVAILABLE FOR WORLDWIDE MARKETS. NATURE'S AG-GEL™ SUPPLIES THE TRACE MINERALS AND NUTRIENTS NEEDED BY HEALTHY PLANTS. NATURE'S AG-GEL™ BREAKS UP TOP SOIL, RETAINS WATER, AND INCREASES PRODUCTIVITY WITH LESS INSECTS, AND PRODUCES HIGHER CROP YIELDS. NATURE'S AG-GEL™ IS A LIQUID PLANT FOOD WITH AMAZING RESULTS. PLANTS LOVE IT. "IT'S A MIRACLE." GROW HEALTHY PLANTS BY USING NATURE'S AG-GEL™ AND REJUVENATE NUTRIENT AND DEPLETED SOILS AROUND THE WORLD.

NATURE'S AG-GEL™ IS MANUFACTURED BY ESSENTIAL SOLUTIONS, INC. (USA). GLOBAL MARKETS ARE NOW BEING ESTABLISHED. ESSENTIAL SOLUTIONS, INC. WILL BECOME A DOMINANT WORLD FIGURE IN THE ECONOMY OF AGRICULTURE BY INCREASING FOOD PRODUCTION AND HELPING TO FEED THE WORLD. FOR DETAILED INFORMATION, CONTACT ESSENTIAL SOLUTIONS, INC. THROUGH OUR EMAIL: ESI@AG-GEL.COM OR WEB SITE AT WWW.AG-GEL.COM.

Worldwide Distributorships are Available.

ESSENTIAL SOLUTIONS, INC.

Website: www.ag-gel.com
Executive Summary

NATURE'S AG-GEL (Liquid Trace Mineral Plant Food)

Essential Solutions, Inc. (the "Company") is a start-up company with multiple markets segments within a multi-billion-dollar industry. The Company believes that it is uniquely positioned to successfully penetrate these market segments based upon test results and marketing feedback about its new agricultural micronutrient product AG-GEL™. The Company's product addresses the worldwide problem of micronutrient depleted soil and the ever-increasing shortage and expense of water for agriculture use.

Micronutrients and Macronutrients

Micronutrients and macronutrients are essential plant nutrients that are required by plants in very small amounts. The micronutrients include copper (Cu), manganese (Mn), boron (B), zinc (Zn), iron (Fe), and molybdenum (Mo) while the macronutrients are made up of sulfur (S), calcium (Ca), and magnesium (Mg). The amounts of individual micronutrients removed by crops are less than 1 kg per hectare (1 Ib/acre). The very small quantities required do not mean that they are less important in plant nutrition. Micronutrients and macronutrients are as essential to plant growth as nitrogen and potassium, which are required in very large quantities. Micro and macronutrients play a variety of different roles in plant nutrition. However, many of them work with enzymes to help facilitate a number of important biochemical reactions in the plant. A deficiency of any one of these nutrients can restrict plant growth as surely and as severely as a deficiency of nitrogen.

Water

Water availability is critical to any economy. Numerous reservoirs and conveyance structures have been constructed to meet the water supply needs of farmers, municipalities, industries, and power generating facilities across the United States. Despite this extensive water management system, water supply remains a concern because of increasing populations and uncertainties about climate stability. People who manage or pay the water bills for sites with large irrigation systems are getting more and more interested in applying water efficiently. Water usage increases dramatically in the summer due primarily to the use of water outdoors, with the majority used for irrigation. Because of the limited opportunities to develop new water supplies and the need to supply water for the growing needs, a reduction in summer peak use is not only advisable, but also necessary. After extensive study it has been determined that conservation of irrigation water offers one of the most effective opportunities to help reduce this peak demand. Evaporation, the process of water molecules gaining enough energy to convert from a liquid form into a gaseous form is one of the most costly and unmanageable aspects of water management. The control of evaporation on irrigated land will increase the productivity and profitability of the operation.

AG-GEL™

AG-GEL™ is a semi-permeable membrane gel providing zinc, copper, manganese, boron, sulfur, calcium, magnesium and iron micro and macronutrients for plant uptake. It also helps prevent water from evaporating from soil reducing the amount of water required. Tests have shown that AG-GEL™ saves up to 60% more water over untreated soil. By absorbing over 700% its dry weight in water, and supplying essential micro and macronutrients, AG-GEL™ becomes a gel sponge with fertilizer that replenishes nutrient depleted soils and reduces water evaporation.

The Company has spent over 3 years developing the process for manufacturing this unique micronutrient fertilizer and soil supplement. This exciting new product, AG-GEL™, has the ability to improve plant growth and conserve water in the soil. By replenishing low or depleted micronutrients which is a worldwide agricultural problem, and reducing the amount of water lost from evaporation, AG-GEL™ will hold a strong position in the global agriculture marketplace.
Essential Solutions, Inc.

Advanced Technology for the Challenging World of Agriculture

NATURE'S AG-GEL (Liquid Trace Mineral Plant Food)

Ag-Gel
Less Water - More Yield

- Rejuvenate nutrient depleted soils, and increase crop productivity.
- Enhance greater water capacity of the soil and decomposition.
- Increases microbial activity, and increases buffering capacity of the soil.
- Acts as a chelating agent and holds micronutrients in a form available for plant uptake.
- Increases aggregation microbial activity and water infiltration.
- Reduces soil crust strength and increases porosity. Tends to improve the pore structure of soil for healthier plants.
- Plants have less stress and become resistant to fungal and insect attack.
- Does not lower soil pH.

Advanced Technology for the Changing World of Agriculture

Worldwide Distributorships are Available.

MANUFACTURED BY:
Essential Solutions, Inc

Email: cs@ag-gel.com Website: www.ag-gel.com
October 16, 2002

Mr. Ted W. Arman
Essential Solutions, Inc.
P.O. Box 1790
Folsom, CA 95763

Dear Mr. Arman:

FERTILIZING MATERIAL LICENSE AND REGISTRATION

This letter is in response to your telephone call of October 15, 2002, requesting a letter on Department letterhead stating that you are currently licensed to distribute and sell your packaged agricultural mineral product in California, and that you are registered to sell your product label AG-GEL.

You are currently licensed to distribute and sell products in California through December 31, 2002. You will receive a Notice of Renewal the latter part of November 2002, to renew your Fertilizing Materials License. Your Fertilizing Materials License Number is 24659.

You are currently registered to sell AG-GEL in California through December 31, 2003. A Notice of Renewal will be sent the latter part of November 2003, to renew your currently registered product label. Your Certificate of Registration Number is 8668.

If you have any questions, please contact me Monday through Thursday at the above number. My fax number is (916) 653-2407.

Sincerely,

Nancy Hensley, Registration Specialist
Agricultural Commodities & Regulatory Services
Inspection Services
STATE OF CALIFORNIA
NOTICE OF RENEWAL
513-116 (Rev. 7/00)

STATE OF CALIFORNIA
DEPARTMENT OF FOOD AND AGRICULTURE
AGRICULTURAL COMMODITIES AND REGULATORY SERVICES

COMMERCIAL FERTILIZING MATERIALS LICENSE

No. 25781

COMMERCIAL FERTILIZING MATERIALS LICENSE

FIRM NO. 2

EXPIRES 12/31/04

ESSENTIAL SOLUTIONS INC.
P O BOX 1790
FOLSOM CA 95763-1790

FEE PAID $100.00

DATE ISSUED 1/27/03

LICENSED LOCATION
P O BOX 1790
FOLSOM 95763-1790
SACRAMENTO

FORM 513-010 (Rev. 8/99) AD 2338/30231419 NA
Essential Solutions, Inc.
Advanced Technology for the Challenging World of Agriculture

Natures Ag-Gel
Less Water - More Yield
Micronutrient Plant Food
ALL PURPOSE LIQUID PLANT FOOD FOR AMAZING PLANT GROWTH

NATURES AG-GEL
SOIL AMENDMENT PLANT FOOD AND NATURAL TRACE MINERALS
GUARANTEED ANALYSIS
Iron (Fe) ........................................ 1.1%
Zinc (Zn) ......................................... 0.36%
Sulfur (S) ........................................... 2.3%

Derived from Ferric Sulfate and Zinc Sulfate.

Information regarding the contents and levels of metals in this product is available on the internet at http://www.ag-gel.com.

This natural product is for Farms and Home Gardens and is safe for the environment.

KEEP AWAY FROM CHILDREN AND PETS. AVOID EYE CONTACT. FLUSH WITH WATER. NOT FOR HUMANS OR ANIMALS.

INSTRUCTIONS: Shake well before using, dilute with water. Mix 2 oz per gallon of water. Vegetables, Perennials, Annuals, Flowers - Use one gallon of solution for 10 sq ft of planting bed every 4 to 6 weeks. Lawns, and Turf Grass - Use 1 gallon of solution for 10 sq ft every 8 weeks. Newly Seeded Lawns - Feed every 4 weeks until lawn is established. Vines and Shrubs - Soak soil around plant every 4 weeks. Trees - Soak soil around tree once each spring, summer, and fall. Indoor plants - Soak soil around plant every 1 to 2 months.

Net Weight Per Gallon .................................. 4.22 Liters

Worldwide Distributions are Available

MANUFACTURED BY:

Essential Solutions, Inc

Email: esi@ag-gel.com Website: www.ag-gel.com
**AG-GEL**

- **Benefits**
  - Use AG-GEL to:
    - enhance your garden yield.
    - replenish essential micro-nutrients.
    - keep soil from compacting, making root growth and tilling much easier.
    - reduce the time to crop maturity.
    - reduce water evaporation from soil.
    - grow healthy plants that resist insect attack.
    - grow quality foods.

- **Results of using AG-GEL**

  The difference in the untreated plants after we treated them with AG-GEL was amazing.

  L. W., Tyler, Texas

  ...after one treatment of AG-GEL, our fruit trees and ornamentals started looking like fine plants from the nursery!

  K. B. Tucson, Arizona

  Ag-Gel works wonders on everything I grow.

  T. A. Fair Oaks, California

- **Water Saving Graph**

  This graph clearly shows AG-GEL’s superior water holding ability. As shown at day six the AG-GEL treated soil still contained 78% of its original moisture while the control only contained 20%.

- **AG-GEL**

  - AG-GEL is a concentrated micronutrient soil replenisher that enhances water capacity of the soil and increases plant growth and quality. AG-GEL was developed to produce faster plant growth and quality foods. It is a water saving plant food.

  - AG-GEL is made from naturally occurring minerals and other beneficial ingredients. It is available in a concentrated liquid gel form.

  - AG-GEL is produced naturally and is non-toxic. No polymers are used.

  - AG-GEL is beneficial to agriculture cropland, ranch pastures, golf courses, residential lawns and gardens. It can be sprayed on the surface and watered in, applied directly to the soil and tilled in, or injected into irrigation systems.

  - AG-GEL contains a semi-permeable gel membrane that absorbs and holds over 700% its dry weight in water. When applied to the soil it creates a moisture reservoir that retains water and reduces evaporation.

  - AG-GEL is produced naturally with high quality ingredients in a patent pending process using pure mineral sources – no animal by-products.
# Essential Solutions, Inc.

Advanced Technology for the Challenging World of Agriculture

<table>
<thead>
<tr>
<th>Nature's AG-GEL™</th>
<th>Price Per Gallon Concentrated</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commercial Farming</td>
<td>All Natural Liquid Trace Minerals, that retains water with no chemicals.</td>
</tr>
<tr>
<td>55 Gallons of Concentrate</td>
<td>$9.00 per Gallon</td>
</tr>
<tr>
<td>5,000 Gallons of Concentrate</td>
<td>$7.20 per Gallon</td>
</tr>
<tr>
<td>10,000 Gallons of Concentrate</td>
<td>$6.30 per Gallon</td>
</tr>
</tbody>
</table>

One gallon of Ag-gel concentrate makes 64 gallons of Agricultural product. Mix 2 ounces per gallon of water for each 10 square feet of soil application, or 6.77 gallons per acre. The cost for diluted one gallon is 0.14 cents; 0.11 cents and 0.10 cents based on the above quantities, prices and discounts.

Nature's AG-Gel™ pricing and availability subject to change. (Retail permits required for California)

### Nature’s AG-GEL™ Availability and Packaging

- Nature’s AG-GEL™ is sold F.O.B. plant and warehouse.
- Allow 30 to 60 days to fill AG-GEL™ order.
- **Drum, Tank Truck, Rail Car and Ship.**
- Net Weight 9.06 lbs. per gallon (4.23 Liters)

Contact Essential Solutions, Inc. for shipping information. **Drum charges may apply.**

### California Fertilizing Material Label Review and License

- Nature’s AG-GEL™ product label is a bulk agricultural liquid mineral and labeling is in accordance with the regulations and distribution and sale by the California Department of Food and Agriculture.
- Certificate of registration for fertilizer materials and commercial fertilizer materials Firm Number is 917 and License Number 2.

*Worldwide Distributorships are Available*

AG-80127-0 Revision C, December 2002

Essential Solutions, Inc

Email: esi@ag-gel.com Website: www.ag-gel.com
# Material Safety Data Sheet

## AG-Gel®

### Section 1. Identification of Product

<table>
<thead>
<tr>
<th>Manufacturer</th>
<th>Essential Solutions, Inc.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Address</td>
<td>PO Box 1790, Folsom, CA 95763</td>
</tr>
<tr>
<td>Telephone Number</td>
<td>(916) 922-8821</td>
</tr>
<tr>
<td>Sales Name</td>
<td>AG-Gel®</td>
</tr>
<tr>
<td>DOT Hazard Class</td>
<td>N.A.</td>
</tr>
<tr>
<td>DOT Shipping Name</td>
<td>N.A.</td>
</tr>
</tbody>
</table>

### Section 2. Physical Data

<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Solids Content</td>
<td>Approximately 15% by wt.</td>
</tr>
<tr>
<td>pH</td>
<td>6.9 to 7.3</td>
</tr>
<tr>
<td>Bulk Density</td>
<td>9.06 lb./gallon</td>
</tr>
<tr>
<td>Corrosiveness</td>
<td>N.A.</td>
</tr>
</tbody>
</table>

### Section 3. Fire, Explosion and Reactivity Hazard Data

<table>
<thead>
<tr>
<th>Flash Point</th>
<th>Non-combustible.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Special Fire Fighting Procedures</td>
<td>N.A.</td>
</tr>
<tr>
<td>Stability</td>
<td>Stable.</td>
</tr>
<tr>
<td>Conditions to Avoid</td>
<td>N.A.</td>
</tr>
<tr>
<td>Incompatibility</td>
<td>None known.</td>
</tr>
</tbody>
</table>

### Section 4. Health Hazard Data

<table>
<thead>
<tr>
<th>Eye Contact</th>
<th>Causes mild eye irritation.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Skin Contact</td>
<td>No known skin irritations.</td>
</tr>
<tr>
<td>Inhalation</td>
<td>None known</td>
</tr>
<tr>
<td>Ingestion</td>
<td>Causes no known irritations.</td>
</tr>
<tr>
<td>Chronic Hazards</td>
<td>No known chronic hazards. Not listed by OSHA, NTP, or IARC as a carcinogen.</td>
</tr>
</tbody>
</table>

**First Aid Procedures**

In case of contact flush eyes and skin with plenty of water. If swallowed give victim glass of water.

---

**Worldwide Distributorships are Available**

AG-80127-0 Revision C, December 2002

Essential Solutions, Inc

Email: esi@ag-gel.com   Website: www.ag-gel.com
AG-GEL™ is a revolutionary new product with trace elements. Use it for all vegetables, fruit trees, grape vineyards, grains, other field crops and golf courses. The new growth will surprise you.

AG-GEL™ Testimonials

We tried AG-GEL™ on our houseplants and in the garden. The difference in growth after we treated the plants is amazing. Our blooming plants are more brilliantly colored and the vegetables are more vigorous and produce more. We plan to continue using AG-GEL™ in the future and will recommend this product to all our friends.

L. W., Tyler, Texas

AG-GEL™, with trace elements in liquid form was diluted to one ounce per gallon of water and put on plants and gardens around the house to see what would happen. To our surprise, the old plants showed new life and their leaves and flowers were brighter than ever before. The neighbors kept asking if some of these plants were artificial. When I told them they were all real, they asked what I was using to get such beautiful plants and flowers. I told them that I have been using AG-GEL™.

A. B., Sacramento, California

I'd put AG-GEL™ on small tomatoes that were about 2 inches high that I bought from a nursery store. I applied AG-GEL™ diluted to one ounce to a gallon of water only one time and continued to water the plants without AG-GEL™. In four weeks that tomato vines were 24 to 30 inches high with many blossoms and small tomatoes. In eight weeks I was harvesting large beautiful tasty tomatoes, and many more to be picked over the next 30 days. AG-GEL™ works for me. This was my first time growing tomatoes in my backyard.

F. A., Fair Oaks, California

I was carrying a 5 gallon bucket of AG-GEL™ without a lid from my truck parked on the street to my backyard. As I walked across my lawn I spilled AG-GEL™ out of the bucket in spots across the lawn. In about two weeks I noticed that there were spots in the lawn greener than the rest of the grass. I then realized that it must be where I spilled the AG-GEL™ several weeks ago. I eventually had to apply AG-GEL™ to the entire lawn to make it all look evenly green. I mixed one oz per gallon of water and applied 1 gallon for every 80 square feet and now I have a beautiful lawn.

R. G., Los Angeles, California

I had no idea that a new product called AG-GEL™ for plants would work on my bad looking tomato plants. I thought I would try AG-GEL™ because a friend recommended it. I followed the instructions of one ounce per gallon of water thinking that I was wasting my time. I put the diluted AG-GEL™ and water solution around the plants and watered periodically. To my surprise the tomatoes responded within one week with many new blossoms and little tomatoes. I am now watching the tomatoes develop to see how many tomatoes I can pick in a few weeks. AG-GEL™ seems to be working without adding any of the usual fertilizers. If this continues to work as well as it has I will be recommending AG-GEL™ to all my friends.

D. A., Newcastle, California

Manufacturers Comment:
AG-GEL™ is a unique product that improves plant growth, reduces plant stress, conserves soil moisture and reduces insect attack. AG-GEL™ has the essential trace minerals that all plants need. AG-GEL™ is made from Mother Nature's natural resources. AG-GEL™ also acts as a catalyst to allow plants to absorb residual nutrients left dormant in the soil from chemical fertilizers. This natural product is the answer to reactivating and rejuvenating the soil for agriculture around the world.

Essential Solutions, Inc

Email: esi@ag-gel.com  Website: www.ag-gel.com
AG-GEL Business Plan

NATURE'S AG-GEL (Liquid Trace Mineral Plant Food)

Ag-Gel: Samples Sent To:

California  China
Nevada    Australia
Arizona    Brazil
Texas     Mexico
Iowa      India
Florida   Korea
Massachusetts   Bangladesh

Other countries to be contacted.

Pending Distributors: When Ag-Gel is in Production:

Sacramento, CA    Bryan, TX
Napa, CA       Cottonwood, CA
Lone Pine, CA    Modesto, CA
Stockton, CA    Fresno, CA
Gardnerville, NV Piedmont, CA

Plus Other distributors to be contacted.

Marketing and Development:

CALTEC Research & Development Co.
Agronomist: Soil and Plant Food Specialist

Field Testing/To Be Assigned:
Agronomic Testing of Ag-Gel
Recommended by the University of California

Member of the California Fertilizer Association

There are 400 member distributors in California to be contacted when ESI is in full production of Ag-Gel.

Worldwide Distributorships are Available.

MANUFACTURED BY:

Essential Solutions, Inc

Email: esi@ag-gel.com    Website: www.ag-gel.com
Essential Solutions, Inc.
Ag-GEL Plant

PLANT ENTRANCE ON PRIVATE ROAD AT IRON MOUNTAIN MINES
PRIVATE PROPERTY WITH LOCKED GATES
Essential Solutions, Inc.
AG-GEL Plant

FUTURE BUILDING AND CONSTRUCTION SITE
PLANT NO TWO FOR EXPANSION

125'

Tanker Drive Through

STORAGE TANKS FOR 300,000 GALLONS OF AG-GEL

Each plant module can produce 4,000,000 gallons of AG-GEL per year

PLANT ENTRANCE ON PRIVATE ROAD AT IRON MOUNTAIN MINES
PRIVATE PROPERTY WITH LOCKED GATES
AC GEL'S UNLIMITED MINERAL RESOURCES OF NATURAL FLOW
OF TRACE MINERALS AND MICRONUTRIENTS

ESSENTIAL SOLUTIONS, INC
Lime Neutralization Plant and Mineral Evaporation Ponds

at Iron Mountain