

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

69461-1

6/21/2005

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
Washington, D.C. 20460

OFFICE OF  
PREVENTION, PESTICIDES  
AND TOXIC SUBSTANCES

June 21, 2005

Ana Rodriguez-Koster  
Agent for MAREVA, Inc.  
Lewis & Harrison  
122 C Street, N.W.  
Suite 740  
Washington, DC 20001

Subject: Revacil  
EPA Registration Number 69461-1  
Application Date: May 5, 2005  
EPA Received Date: May 5, 2005

Dear Ms. Rodriguez-Koster:

The following amendment, submitted in connection with registration under the Federal Insecticide, and Rodenticide Act (FIFRA), as amended, is acceptable with the conditions listed below:

**Proposed Amendment**

- Revised labeling to add industrial use sites

**Conditions**

- The ingredient statement must total 100%.

**General Comments**

A stamped copy of the labeling accepted with conditions is enclosed. Submit three(3) copies of your final printed labeling before distributing or selling the product bearing the revised labeling.

Should you have any questions or comments concerning this letter, please contact me at 703-308-6422.

Sincerely,

Adam Heyward  
Product Manager 34

**CONCURRENCES**

IBOL	7/5/05							
NAME	J. Hay							
FE	6-21-05							

Regulatory Management Branch II  
Antimicrobials Division (7510.C)

# REVACIL

[P20 D Grade]

[SWIMMING POOL] [SPA] [AND] [HOT TUB] [SANITIZER] [AND] [ALGISTAT]  
[Do not use in freestanding [spas][hot tubs].]

[Do not use in unpainted plaster pools previously exposed to metals which may cause staining (See current "pool [care] [owner's] guide" for specific information]

[Chlorine Free]

[1-877-REVACIL]

[Swimming pool sanitizer and algistat – Not a disinfectant]

[Microbiocide]

[Revacil is a high activity microbiocide and in-can preservative for use in applications such as oil-in-water and water-in-oil emulsions, industrial reagents, silicone systems and cellulose solutions. Revacil can also be used for the preservation of animal hides and skins.]

### Active Ingredient:

Poly

(iminoimidocarbonyliminoimido-carbonyliminohexamethylene hydrochloride)..... 20.0%

Inert Ingredients: ..... 80.0%

**KEEP OUT OF REACH OF CHILDREN**

## WARNING

See [Side] [Back] Panel for [Additional] [Precautions] [Precautionary Statements] and First Aid [Treatment]

Net Contents:

MAREVA, Inc.  
1119 Cavalier Blvd.  
Chesapeake, VA 23323  
USA

EPA Reg. No. 69461-1  
EPA Est. No. 69461-FRA-1

[Product of France] [Made in France]

[Member of National Spa & Pool Institute logo]

Under the Federal Insecticide,  
Fungicide, and Rodenticide Act as  
amended, for the pesticide,  
registered under EPA Reg. No. 69461-1

\*Bracketed text denotes alternate marketing language and use directions.

## PRECAUTIONARY STATEMENTS

### HAZAF TO HUMANS AND DOMESTIC ANIMALS

**WARNING. Causes substantial but temporary eye injury. Harmful if swallowed.** Do not get concentrate in eyes or on clothing. Avoid contact with skin. Avoid breathing vapor or mist. Wash thoroughly with soap and water after handling. Wear goggles or shield when handling concentrate. Keep container closed.

(Note to Reviewer: Boxed format or bullets may be used in First Aid Section if label space permits.)

FIRST AID	
<b>IF SWALLOWED:</b>	<ul style="list-style-type: none"> <li>• Call a poison control center or doctor immediately for treatment advice.</li> <li>• Have person sip a glass of water if able to swallow.</li> <li>• Do not induce vomiting unless told to do so by a poison control center or doctor.</li> <li>• Do not give anything by mouth to an unconscious person.</li> </ul>
<b>IF ON SKIN OR CLOTHING:</b>	<ul style="list-style-type: none"> <li>• Take off contaminated clothing.</li> <li>• Rinse skin immediately with plenty of water for 15-20 minutes.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>
<b>IF IN EYES:</b>	<ul style="list-style-type: none"> <li>• Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>
<b>IF INHALED:</b>	<ul style="list-style-type: none"> <li>• Move person to fresh air.</li> <li>• If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible.</li> <li>• Call a poison control center or doctor for further treatment advice.</li> </ul>
Have the product container or label with you when calling a poison control center or doctor, or going for treatment.	

(If container size is 5 gallons or greater, use the following statement:)

### ENVIRONMENTAL HAZARDS

This product is toxic to fish. Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans, or other water unless in accordance with the requirements of a national Pollutant Discharge Elimination System (NPDES) permit and the permitting authority has been notified in writing prior to discharge. Do not discharge effluent containing this product to sewer systems without notifying the local sewage treatment plant authority. For guidance contact your State Water Board or Regional Office of EPA.

(If container size is less than 5 gallons, use the following statement:)

### ENVIRONMENTAL HAZARDS

This product is toxic to fish.

ACCEPTED  
with COMMENTS  
EPA Letter Dated:

JUN 21 2005

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[[This product] {REVACIL} [sanitizer] is registered as a swimming pool, spa and hot tub sanitizer, not as a disinfectant.]

### DIRECTIONS FOR USE

It is a violation of federal law to use this product in a manner inconsistent with its labeling.

Important – REVACIL [sanitizer] is incompatible with chlorinating chemical products. Consult your authorized [Dealer of REVACIL] [REVACIL Dealer] for information on balancing your pool water.

#### [Start up] [Treating the pool]

##### [Pools Previously Treated with Chlorinating Chemicals]

Check with chlorine test kit for free and combined chlorine prior to the beginning of neutralization. To destroy chlorine, add [STOP CHLORE] [REVASTOPCHLORINE] chlorine neutralizer per label directions. Filter overnight.

Check with chlorine test kit. If free chlorine is detected, repeat neutralizer treatment.

*(Note to reviewer: Directions may be lettered or numbered on final printed labeling.)*

##### Freshly Filled and Dechlorinated Pools

##### **Start up with REVACIL [sanitizer]**

Note: If the pool water contains algae or is hazy, consult the problem-solving section of the "Pool [Owner's] [Care] Guide," available from your authorized [Dealer of REVACIL] [REVACIL Dealer] [(See REVABLUE section)].

\* Backwash or clean pool filter. Check pool pH; adjust to 7.0 – 7.8 if necessary.

\* Add REVACIL [sanitizer] to give a content of 50 ppm (1/2 gallon product/10,000 gallons of [pool] water).

\* After 24 hours, check pH and REVACIL [sanitizer] concentration with the test kit for REVACIL [sanitizer] and adjust if necessary

##### **[Maintenance] Normal Pool Routine**

\* Every week, check REVACIL [sanitizer] concentration and pH.

\* Maintain REVACIL [sanitizer] concentration at about 50 ppm. If concentration falls 10 ppm or more, add a top-up dose. The level should not be allowed to drop below 30 ppm. For example, to raise the REVACIL [sanitizer] level 10ppm, add [16 oz.] [1 pint] per 10,000 gallons of [pool] water. Consult the booklet, "The Pool [Owner's] [Care] Guide for REVACIL [sanitizer]," for calculation instructions.

NOTE: REVACIL [sanitizer] AND CHLORINE ARE INCOMPATIBLE.

Refer to the Pool [Owner's] [Care] Guide for REVACIL [sanitizer] for information on how to deal with accidental chlorination.

REVACIL®, REVATOP®, STOP CHLORE®, REVASTOPCHLORINE®, and STOP METAL® are trademarks of Mareva, Inc.

##### **Problem-Solving and Supplemental Pool Information.**

Do not use in free, sliding spas/hot tubs. Do not use in unpainted plaster pools previously exposed to metals which may cause staining.

REVACIL [sanitizer] is not compatible with many detergents and some supplemental algacides (such as those based on copper).

If algae development, cloudiness, or pool problems occur or additional information on water quality is desired, consult "The Pool [Owner's] [Care] Guide for REVACIL," available from your [Authorized Dealer of REVACIL [sanitizer]] [REVACIL [sanitizer] Authorized Dealer].

#### [Treating the spa or hot tub]

Important - REVACIL [sanitizer] is incompatible with chlorinating [and] [or] brominating chemical products.

*(Note to reviewer: Directions may be lettered or numbered on final printed labeling.)*

##### **Start up with REVACIL [sanitizer]**

- \* Remove chlorine or bromine source and disconnect feeder. Discontinue use of ionizers and electrochlorinators if present.
- \* Drain existing water in spa.
- \* Clean [spa][hot tub] [surface] [with water] [and filter].
- \* Fill [spa][hot tub] [surface] with water.
- \* [Bring a sample of [spa] [hot tub] water to your [REVACIL [sanitizer] Authorized dealer] [Authorized Dealer of Revacil [sanitizer]] to check it for proper water balance.] [Have your authorized dealer of REVACIL [sanitizer] check your water for proper water balance.]
- \* After [your] [spa] [hot tub] water has been balanced, add REVACIL [sanitizer] to give a concentration of 50 ppm. (1 [fl.] oz. of product [for] [per] 150 gallon of [spa] [hot tub] water).
- \* Circulate [water] [for] 30 minutes then check the REVACIL [sanitizer] [level] [concentration] [with REVACIL TEST STRIPS] [and]. Adjust if necessary.

##### **[Normal] Spa/Hot Tub Maintenance**

- \* Every week, check REVACIL [sanitizer] concentration and pH. Adjust if necessary.
- \* The [level of] REVACIL [sanitizer] [level] should be maintained between 30 and 50 ppm. [When the level of REVACIL is 30 ppm or less, add enough REVACIL to bring the level up to 50 ppm.]
- \* The [REVACIL level] [spa's level of REVACIL] should never [be allowed to] drop below 30 ppm.
- \* To raise the [REVACIL] sanitizer level 10 ppm, add 0.2 oz. per 150 gal. of [spa] water.]

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[[This product][Revacil] is compatible with other [pool][spa] maintenance products such as [REVATOP] [REVABLUE] [REVAOUT] [REVAKL/ REVApH-UP] [REVApH-DOWN][REVALKALINITY] [REVACALCIUM-UP] [REVAFLOCK] [REVAKLAR] [REVAPURE] [REVAFILTER] [REVANET] [REVAPIPE] [REVASTOP-FOAM] [REVASTOP-CHLORINE] [REVASTOP MUSTARD ALGAE] [REVA-SPA Shock] [REVA-SPA Stain and Scale Control] [REVA-SPA Water Line Control] [REVA-SPA Foam Dispenser] [REVA-SPA Water Clarifier] [REVA-SPA Test Strips].]

(Note to Reviewer: The following use directions will appear on product labels sold for industrial uses.)  
[Typical applications and suggested dosages include:

<b>Product:</b>	<b>Dosage:</b>
<b>Silicones</b> such as silicone emulsions and silicone dispersions	1 lb. to 50 lb. Revacil per 10,000 lb. product
<b>Tunnel Pasteurization Waters</b>	13 fl. oz. to 1 gal. of Revacil per 1,000 gal. tunnel pasteurization water
<b>Aqueous Industrial Chemicals</b> such as reagents, oil-in-water emulsions, water-in-oil emulsions, textile spin finish lubricants, wash water and cellulose solutions	1 lb. to 50 lb. of Revacil per 10,000 lb. of product
<b>Leather Processing</b>	1 lb. to 30 lb. per 10,000 product
<b>Aqueous Based Polymer Latices</b> such as polyvinyl acetate and polyvinyl alcohol. Do not use to preserve latices used for paper coating compositions that may contact food	5 lb. to 50 lb. Revacil per 10,000 lb. product
<b>Aqueous Mineral Slurries</b> such as calcium carbonate, titanium dioxide. Do not use to preserve slurries used for paper coating compositions that may contact food	5 lb. to 50 lb. Revacil per 10,000 lb. of product
<b>Aqueous Based Adhesives</b> such as animal glues, latex adhesives based on polyvinyl acetate, PVA, etc., starch, synthetic, dextrin, casein and other glues	5 lb. to 50 lb. Revacil per 10,000 product
<b>Industrial Electrocoats</b> such as electrocoat resins and depositions systems	10 lb. to 50 lb. Revacil per 10,000 product
<b>Household Consumer Products</b> such as surface cleaners, floor cleaners, fabric stain removers, fabric softeners, fabric conditioners, laundry detergents, laundry additives, automotive care silicone emulsions, and automotive cleaning products	2.5 lb. to 25 lb. Revacil per 10,000 product

<b>Product: (continued)</b>	<b>Dosage: (continued)</b>
<b>Preservation of Fresh Animal Hides and Skins</b>	1.0-2.6 lbs. of Revacil per 1,000 lb. of product
<b>Cellulosic Materials and Textiles</b> such as cotton, cotton blends, cellulosic materials, and synthetic fibers such as non-wovens, tissues, paper and pulps	Revacil is diluted and applied to give 0.025-2% on the dry weight of the substrate
<b>Oil Recovery</b>	Specific rates for use of Revacil should be determined by bacteriological tests made prior to treatment. Not for use in oil recovery systems that employ holding ponds for spent liquids

See Technical Information Bulletin for more detailed list of applications and appropriate dosages.]

\*Bracketed text denotes alternate marketing language and use directions.

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## STORAGE AND DISPOSAL

*(Bulk/Non-Residential Label:)*

Do not contaminate water, food or feed by storage and disposal.

**Pesticide storage:** Keep container closed when not in use. Store in original container in an area inaccessible to children. Protect from freezing. In case of a leak or spill, soak up with absorbent, such as sand earth, or sawdust, and shovel into waste container. Remove waste to chemical waste area, and dispose of in accordance with pesticide disposal instructions.

**Pesticide disposal:** Pesticide wastes are toxic. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal Law. If these wastes cannot be disposed of by use according to according to label instruction, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA regional Office for guidance.

**Container Disposal:** Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

*(Residential/Small Container Label:)*

**[Pesticide] Storage:** Keep container closed when not in use. Store in original container in an area inaccessible to children. Protect from freezing. In case of a leak or spill, soak up with absorbent, such as sand earth, or sawdust, and shovel into waste container. Remove waste to chemical waste area, and dispose of in accordance with pesticide disposal instructions.

**[Pesticide] Disposal:** Securely wrap original container in several layers of newspaper and discard in trash.

## NOTICE TO BUYER AND USER] [- LIMITED WARRANTY FROM MAREVA INC.(PROM)<sup>1</sup>

Mareva, Inc. (PROM) warrants that this product conforms to the chemical description on the label and that it is reasonably fit for the purposes stated on the label when used in accordance with Mareva's (PROM's) directions under normal conditions of use. This warranty does not extend to the use of this product contrary to label instructions, or under abnormal use conditions, or under conditions not reasonably foreseeable to Mareva (PROM), and you as buyer or user assume the risk of any such use. Mareva (PROM) will replace the product or refund the purchase price at your option should this warranty be breached within one year of sale. THE DURATION OF ANY IMPLIED WARRANTIES UNDER APPLICABLE STATE LAWS SHALL LIKEWISE BE LIMITED TO A PERIOD OF ONE YEAR.

Some states do not allow limitations on how long an implied warranty lasts, so the above limitations may not apply to you.

IN NO EVENT SHALL MAREVA (PROM) BE LIABLE FOR ANY SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES, INCLUDING LOST PROFITS, ON ANY THEORY WHATSOEVER, INCLUDING NEGLIGENCE, and no person is authorized to alter the terms of Mareva's (PROM's) warranty. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you.

For warranty assistance, write Business Manager, [REVACIL] (Distributor Product Name), Mareva, Inc. (PROM), 1119 Cavalier Blvd., Chesapeake, VA 23323 (Distributor address) or contact your [product name] [REVACIL] (Distributor Product Name) authorized dealer. This warranty gives you specific legal rights, and you may have other rights that vary from state to state.

YOUR AUTHORIZED DEALER GIVES NO WARRANTY IN ADDITION TO MAREVA's (PROM's) [WARRANTY] [WARRANTIES] AND DISCLAIMS ALL OTHER WARRANTIES INCLUDING THOSE OF FITNESS OR MERCHANTABILITY.

<sup>1</sup> ( ) Parenthesis denotes alternate text for distributor labels. **PROM** is used solely for illustrative purposes. Additional distributor names may be substituted for PROM.

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# Revacil

## [P20 D Grade]

### Technical Information Bulletin

#### General Information

Revacil is a highly effective preservative for use in a wide variety of applications including oil-in-water and water-in-oil emulsions, industrial reagents, silicone systems, cellulose solutions and oil recovery systems. Revacil can also be used for the preservation of animal hides and skins and certain textiles and cellulosic products.

#### Physical Properties

Specific Gravity at 68°F: 1.04 (approx.)  
Density at 68°F, lb/gal: 8.8 (approx.)  
Flash Point, °F (TCC): n.a.  
Pour Point, VF: 32  
PH at 77°F: 4.5 (approx.)

#### Chemical Description

Revacil is an aqueous solution of polyhexamethylene biguanide hydrochloride and is soluble in water and stable under all normal conditions of storage. The active ingredient, itself, is heat stable and nonvolatile.

#### Compatibility

Revacil P20 D is a mild cationic compound and is compatible with nonionic and cationic compounds. Revacil P20 D, nonionics and cationics should be metered through separate pumps. Revacil P20 D is not compatible with oxidizing chemicals, most anionic compounds and copper or other valent metals. Revacil P20 D is precipitated by strong alkalis and complex phosphates. When doubt exists as to the compatibility of Revacil P20 D with other compounds, bottle tests at the concentrations to be used should be made with the material in question.

#### Directions for Use

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

#### Product

#### Dosage

##### Silicones:

Use Revacil at levels of 100-5,000 ppm for the preservation of silicone systems such as silicone systems such as silicone emulsions and silicone dispersions.

1 lb. to 50 lb.  
Revacil  
per 10,000 lb.  
product

#### Product

#### Dosage

##### Tunnel Pasteurization:

For the preservation of waters used in tunnel pasteurization and tunnel cooling of sealed packages of canned and bottled foodstuffs, use Revacil at levels of 100-1,000 ppm.

13 fl.oz. to 1 gal.  
Revacil  
per 1,000 gal.  
tunnel  
pasteurization  
water

##### Aqueous Industrial Chemicals:

For the preservation of aqueous industrial chemicals such as reagents, oil-in-water emulsions, water-in-oil emulsions, textile spin finish lubricants, wash water and cellulose solutions, use Revacil at levels of 100-5,000 ppm.

1 lb. to 50 lb.  
Revacil  
per 10,000 lb.  
product

##### Leather Processing:

Use Revacil at levels of 100-3,000 ppm for the preservation of leather processing solutions.

1 lb to 30 lb.  
Revacil  
per 10,000 lb.  
product

##### Aqueous Based Polymer Latices:

Use Revacil at levels of 500-5,000 ppm for the preservation of aqueous based polymer latices such as polyvinyl acetate and polyvinyl alcohol. Do not use to preserve latices used for paper coating compositions that may contact food.

5 lb. to 50 lb.  
Revacil  
per 10,000 lb.  
product

##### Aqueous Mineral Slurries:

Use Revacil at levels of 500-5,000 ppm for the preservation of aqueous mineral slurries such as calcium carbonate, titanium dioxide. Do not use to preserve slurries used for paper coating compositions that may contact food.

5 lb. to 50 lb.  
Revacil  
per 10,000 lb.  
product

**Product**

**Dosage**

***Aqueous Based Adhesives:***  
 Use Revacil for the preservation of aqueous based adhesives such as animal glues, latex adhesives based on polyvinyl acetate, PVA, etc., starch, synthetic, dextrin, casein and other glues at a concentration of 500-5,000 ppm. May be used in aqueous based latex adhesives intended for food packaging applications at a maximum use level of 5,000 ppm.

5 lb. to 50 lb.  
 Revacil  
 per 10,000 lb.  
 product

***Industrial Electrocoats:***  
 Use Revacil at levels of 1,000 – 5,000 ppm for the preservation of electrocoat resins and deposition systems.

10 lb. to 50 lb.  
 Revacil  
 per 10,000 lb.  
 product

***Household Consumer Products:***  
 Use Revacil at levels of 250 – 2,500 ppm for the preservation of liquid and solid or paste consumer products such as surface cleaners, floor cleaners, fabric stain removers, fabric softeners, fabric conditioners, laundry detergents, laundry additives, automotive care silicone emulsions, and automotive cleaning products.

2.5 lb. to 25 lb.  
 Revacil  
 per 10,000 lb.  
 product

***Preservation of Fresh Animal Hides and Skins:***  
 To preserve the integrity of fresh animal hides and skins prior to or during processing, use 15 fluid ounces to 3 gallons. Add the appropriate quantity of Revacil to the brine solution during the curing operation or treat hides or skins with an appropriately diluted aqueous solution during other portions of the processing operation. The specific use rate and contact time needed to control microbial attack will depend upon the degree of decomposition of the hides or skins prior to treatment.

1.0-2.6 lbs. of  
 Revacil  
 per 1,000  
 Pounds of  
 hides or skins

**Cellulosic Materials and Textiles**

Revacil can be used as an agent to control the growth and action of microorganisms, and control generation of odors, on textiles such as cotton, cotton blends, cellulosic materials, and synthetic fibers such as non-wovens, tissues, paper and pulps.

Revacil is diluted and applied to give 0.025-2.0% on the dry weight of the substrate. Application is by conventional means such as padding, spraying, soaking or exhaustion. The optimum conditions for application of the dilute solution are pH 6.5-8 and temperature of 20-30°C.

The following are examples of products (substrates) suitable for antimicrobial finishing with Revacil:

Textiles such as: household products, for example, upholstery, carpet, curtains, wall coverings, mops, dishcloths, yarns, cords, and toweling.

Cellulosics such as: wipes, tissues, sponges, paper products (non-food contact) such as filters and cellulose pulp.

**Oil Recovery**

Not for use in oil recovery systems that employ holding ponds for spent liquids. Do not apply in, over or near marine and/or estuarine oil fields.

Specific rates for use of Revacil should be determined by bacteriological tests made prior to treatment. These tests should establish (a) the presence of microorganisms, (b) the severity of the problem, and (c) required treating ratio. The effectiveness of a treatment can be evaluated by similar bacteriological tests. The compatibility of Revacil with the water should be determined prior to treatment.

Some suggested treatment methods and treating rates for water systems include:

**Oil Field Injection Waters**

1. SLUG METHOD – When the system is noticeably fouled, apply 4 gallons of Revacil per 1,000 barrels of water (95 ppm of product). Revacil should be added to the system at a point where it will be uniformly mixed. Repeat on a weekly basis, or as needed to establish control.

When microbial control is evident, the treating rate may be lowered to 2 gallons of Revacil per 1,000 barrels of water (47 ppm of product) weekly, or as needed to maintain control.

Badly fouled systems should be cleaned before treatment is begun.

2. CONTINUOUS METHOD – Before beginning a continuous treatment, apply a slug treatment of 4 gallons of Revacil per 1,000 barrels of water (95 ppm of product). Continue treatment by applying 0.15 to 0.8 gallons (19 to 102 ounces) of Revacil per 1,000 barrels of water (4 to 20 ppm of product).

#### **Drilling Muds**

1. Calculate the total volume of drilling mud system, and using this volume calculate the number of gallons of Revacil needed to produce a concentration of approximately 3,000 ppm. For example, 126 gallons of Revacil per each 1,000 barrels of total volume will produce this concentration.
2. While the system is circulating, add the amount of Revacil calculated above in a thin stream.
3. As the well depth increases, increasing the total volume of the system, add additional Revacil as required to maintain the proper concentration.

#### **Workover Fluids**

1. Calculate the total volume of the workover fluid system, and using this volume calculate the number of gallons of Revacil needed to produce a concentration of approximately 3,000 ppm. For example, 126 gallons of Revacil per each 1,000 barrels of total volume will produce this concentration.
2. Add Revacil into the system
3. Circulate the workover fluid system until the fluid returns clear.
4. Shut the system down and idle for several hours.
5. Remove the workover fluid. The well should be ready for productive use.

#### **General**

Revacil is an effective preservative in most aqueous compositions. The concentration required to give protection depends on factors such as the susceptibility of the system to microbiological degradation, the extent to which microorganisms can gain access and the type of microorganisms present.

#### **Packaging**

Revacil is packaged in  
1000 Kg containers (≈264 gallons),  
200 Kg (≈52.8 Gal.) drums  
20 Kg (≈5.28 Gal) or 5 Kg (≈1.3 Gal) pails

#### **WARNING**

##### **Keep Out of Reach of Children**

Causes substantial but temporary eye injury. Harmful if swallowed. Do not get concentrate in eyes or on clothing. Avoid contact with skin. Avoid breathing vapor or mist. Wash thoroughly with soap and water after handling. Wear goggles or shield when handling concentrate. Keep container closed.

#### **First Aid:**

**If Swallowed:** Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Avoid alcohol. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give anything by mouth to an unconscious person.

**If on Skin or Clothing:** Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.

**If in Eyes:** Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.

**If Inhaled:** Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible. Call a poison control center or doctor for further treatment advice. Have the product container or label with you when calling a poison control center or doctor, or going for treatment.

#### **Environmental Hazards**

This product is toxic to fish. Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans, or other water unless in accordance with the requirements of a national Pollutant Discharge Elimination System (NPDES) permit and the permitting authority has been notified in writing prior to discharge. Do not discharge effluent containing this product to sewer systems without notifying the local sewage treatment plant authority. For guidance contact your State Water Board or Regional Office of EPA.

#### **Storage and Disposal**

Do not contaminate water, food or feed by storage and disposal.

**Pesticide storage:** Keep container closed when not in use. Store in original container in an area inaccessible to children. Protect from freezing. In case of a leak or spill, soak up with absorbent, such as sand earth, or sawdust, and shovel into waste container. Remove waste to chemical waste area, and dispose of in accordance with pesticide disposal instructions.

**Pesticide disposal:** Pesticide wastes are toxic. Improper disposal of excess pesticide, spray mixture, or rinsate is a



violation of Federal Law. If these wastes cannot be disposed of by use according to according to label instruction, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA regional Office for guidance.

**Container Disposal:** Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

For information, please contact Customer Services at 1-877-REVACIL.

Mareva, Inc.  
1119 Cavalier Blvd.  
Chesapeake, VA 23323  
USA