ACTICIDE® L 30

ENVIRONMENTAL HAZARDS
This pesticide is toxic to fish. Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans or other waters 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 previously notifying the local sewage treatment plant authority. For guidance contact your State Water Board or Regional Office of the EPA. Do not contaminate water by cleaning of equipment or disposal of waste.

STORAGE AND DISPOSAL
Do not contaminate water, food, or feed by storage or disposal

PESTICIDE STORAGE: Keep away from heat.

PESTICIDE DISPOSAL: Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide or rinsate is a violation of Federal Law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

CONTAINER DISPOSAL: Non-refillable container. Do not reuse or refill this container. Triple rinse container promptly after emptying. Triple rinse as follows: [For containers < 5 gallons in size] - Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds, after the flow begins to drip. Fill the container ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. [For containers > 5 gallons in size] - Empty the remaining contents into application equipment or a mix tank. Fill the container ¼ full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its side and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

GENERAL: CONSULT FEDERAL, STATE OR LOCAL DISPOSAL AUTHORITIES FOR APPROVED ALTERNATIVE PROCEDURES.

CONDITIONS OF SALE AND WARRANTY: Thor GmbH warrants that the product conforms to its chemical description and is reasonably fit for the purpose stated on the label only when used in accordance with label directions under normal conditions of use. THOR GMBH MAKES NO OTHER EXPRESS OR IMPLIED WARRANTIES EITHER OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR USE. Handling, storage and use of the product by Buyer or User are beyond the control of Thor GmbH and Seller. Risks such as ineffectiveness or other unintended consequences resulting from, but not limited to, failure to follow label directions will be assumed by the Buyer or User. IN NO CASE WILL THOR GMBH OR SELLER BE HELD LIABLE FOR CONSEQUENTIAL, SPECIAL OR INDIRECT DAMAGES RESULTING FROM THE HANDLING, STORAGE OR USE OF THIS PRODUCT.

Precautionary Statements:

Danger to Humans and Domestic Animals

DANGER

Corrosive: May be fatal if swallowed. Causes skin burns. Causes irreversible eye damage. Harmful if inhaled or absorbed through skin. Do not get in eyes, on skin, or on clothing. Avoid breathing spray mist. Wear protective eyewear (goggles, face shield, or safety glasses). Wear coveralls worn over long-sleeved shirt and long pants, socks, chemical-resistant footwear, and chemical resistant gloves (such as Natural Rubber, Section Category A). Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, or using tobacco. Remove and wash contaminated clothing before use. When mixing and loading wear a chemical resistant apron. Prolonged or frequently repeated skin contact may cause allergic reaction in some individuals.

User Safety Recommendations

Users should wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet. Users should remove clothing immediately if product gets inside. Then wash thoroughly and put on clean clothing. Users should remove personal protective equipment immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

Physical and Chemical Hazards

Avoid contact with metal equipment. Reacts with oxidizing agents

Directions for Use

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

Do not apply this product in a way that will contact workers or other persons.

Industrial microbiocide to control the growth of slime-forming, spoilage, odor-causing and corrosion inducing bacterial and algae in industrial applications. READ AND FOLLOW THE DIRECTIONS FOR USE ON THE ACCOMPANYING INFORMATION SHEET.

EPA Reg. No. 67071-75

Manufactured By/For: Thor GmbH
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Tel. (203) 516-6860

UN 3265, CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S.
(2-BROMO-2-NITROPROPANE-1,3-DIOL), & PG-III

Batch: Mfg Date: Net Contents (pounds):
**ACTICIDE® L 30**

**INFORMATION SHEET**

**THIS ACTICIDE® L 30 INFORMATION SHEET MUST ACCOMPANY EACH SHIPMENT OF ACTICIDE® L 30**

**DIRECTIONS FOR USE**

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

ACTICIDE® L 30 can be dosed directly either by open pouring or by metered pump. Do not apply by open pouring of liquid to cooling water systems; a metered pump system is required for this use and application method. For in-can product preservation ACTICIDE® L 30 is best added to any liquid phase as late as possible during the manufacturing process and after any heating stage, or when the product is cooled below 40°C. Ensure good mixing and even distribution.

<table>
<thead>
<tr>
<th><em>WATER BASED PRINTING INKS AND FOUNTAIN SOLUTIONS:</em></th>
</tr>
</thead>
<tbody>
<tr>
<td>To inhibit the growth of bacteria during the storage and use of water based printing inks, including their use as fountain solutions,</td>
</tr>
<tr>
<td><strong>In-can preservation</strong></td>
</tr>
<tr>
<td><strong>0.03 – 0.2%</strong></td>
</tr>
<tr>
<td>3.0 – 20 LB / PER 1000 LB PRODUCT</td>
</tr>
<tr>
<td><strong>0.017 – 0.034%</strong></td>
</tr>
<tr>
<td>1.4 – 2.9 LB / PER 1000 GALS SOLUTION</td>
</tr>
</tbody>
</table>

*Not approved for this use in the State of California*

<table>
<thead>
<tr>
<th><em>METAL WORKING FLUIDS:</em></th>
</tr>
</thead>
<tbody>
<tr>
<td>For use in soluble oils, semi-synthetic and synthetic fluids. Add directly to the sump (with agitation) for tank-side addition and allow to circulate for about 1 hour before shutdown. Also for use as tank-side additive to diluted fluids.</td>
</tr>
<tr>
<td><strong>0.033 – 0.33%</strong></td>
</tr>
<tr>
<td>0.33 – 3.3 LB / PER 1000 GALS</td>
</tr>
<tr>
<td>METAL WORKING FLUID</td>
</tr>
</tbody>
</table>

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<table>
<thead>
<tr>
<th><em>ADHESIVES:</em></th>
</tr>
</thead>
<tbody>
<tr>
<td>recommended as an in-container preservative for the control of bacteria and fungi in water soluble and water dispersed adhesives and mastics including animal glues, vegetable glues, natural rubber latices, polyvinyl acetate, styrene-butadiene and acrylic latices</td>
</tr>
<tr>
<td><strong>0.05 – 0.2%</strong></td>
</tr>
<tr>
<td>0.5 – 2.0 LB / PER 1000 LBS</td>
</tr>
<tr>
<td>FORMULATION</td>
</tr>
</tbody>
</table>

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<table>
<thead>
<tr>
<th><em>BUILDING MATERIALS:</em></th>
</tr>
</thead>
<tbody>
<tr>
<td>recommended as an in-container preservative for the control of bacteria and fungi in building materials including mastics, caulks, joint cements, spackling, grouting, concrete admixtures</td>
</tr>
<tr>
<td><strong>0.025 – 0.15%</strong></td>
</tr>
<tr>
<td>0.25 – 1.5 LB / PER 1000 LBS</td>
</tr>
<tr>
<td>FORMULATION</td>
</tr>
</tbody>
</table>

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**DIRECTIONS FOR USE**

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<table>
<thead>
<tr>
<th>Category</th>
<th>Description</th>
<th>Formulation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ABSORBENT CLAYS:</strong></td>
<td>For in-can preservation impregnate absorbent clays including fullers earth, sepiolite and attapulgite. <em>Not approved for this use in the State of California</em></td>
<td>0.008 – 0.07% 0.08 – 0.7 LB / PER 1000 LBS FORMULATION</td>
</tr>
<tr>
<td><strong>PAINTS AND COATINGS:</strong></td>
<td>For in-can preservation of aqueous paints and coatings. <em>Not approved for this use in the State of California</em></td>
<td>0.033 – 0.167% 0.33 – 1.67 LB / PER 1000 LBS FORMULATION</td>
</tr>
<tr>
<td><strong>PRESERVATIVE FOR LATICES, POLYMER EMULSIONS OR SOLUTIONS:</strong></td>
<td>Recommended for the control of bacteria and fungi in the manufacture and storage of synthetic and natural polymer latices including: acrylics, styrene-butadiene, carboxylated styrene-butadiene, ethylene-vinyl acetate and biopolymers intended for industrial use including xanthan gum, gum arabic, guar gum, protein derived polymers, starches and casein derived polymers <em>Not approved for this use in the State of California</em></td>
<td>0.033 – 0.167% 0.33 – 1.67 LB / PER 1000 LBS FORMULATION</td>
</tr>
<tr>
<td><strong>STARCH, PIGMENT, MINERAL AND EXTENDER SLURRIES:</strong></td>
<td>Recommended for the control of bacteria and fungi in the manufacture and storage of starch, dispersed pigments/colorants, mineral slurries and extender slurries <em>Not approved for this use in the State of California</em></td>
<td>0.012 – 0.167% 0.12 – 1.67 LB / PER 1000 LBS FORMULATION</td>
</tr>
<tr>
<td><strong>LIQUID HOUSEHOLD AND INSTITUTIONAL PRODUCTS:</strong></td>
<td>For the control of bacteria and fungi in liquid soaps, liquid cleaners, liquid detergents, liquid laundry products, liquid dishwashing detergents, waxes, polishes, liquid fabric treatment/refresher products, liquid air fresheners/deodorizers, car care products, and other similar cleaners. For the control of bacteria and fungi in packaged utility products such as pre-moistened sponges and mops. May be added to those products formulated as concentrates which are in turn diluted for use at a level to ensure that the final use-dilution product will contain between 25 ppm to 500 ppm active ingredient. <em>Not approved for this use in the State of California</em></td>
<td>0.008 – 0.167% 0.08 – 1.67 LB / PER 1000 LBS FORMULATION</td>
</tr>
</tbody>
</table>
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<tr>
<th><strong>SEMI-SOLID/SOLID HOUSEHOLD AND INSTITUTIONAL PRODUCTS:</strong></th>
<th><strong>0.008 – 0.167%</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>For the control of bacteria and fungi in semi-solid/solid soaps, semi-solid/solid cleaners, semi-solid/solid detergents, semi-solid/solid laundry products, semi-solid/solid dishwashing detergents, waxes, polishes, semi-solid/solid fabric treatment/refresher products, semi-solid/solid air fresheners/deodorizers, car care products, and other similar cleaners.</td>
<td>0.08 – 1.67 LB / PER 1000 LBS FORMULATION</td>
</tr>
<tr>
<td>For the control of bacteria and fungi in packaged utility products such as pre-moistened sponges and mops.</td>
<td></td>
</tr>
<tr>
<td>For the control of bacteria and fungi in solutions that are then put into/onto wet wipes for use in industrial, commercial, residential and household uses cited above. Wet wipes containing a solution preserved with this product may not be used for personal care, as baby wipes, or for food contact.</td>
<td></td>
</tr>
<tr>
<td>May be added to those products formulated as concentrates which are in turn diluted for use at a level to ensure that the final use-dilution product will contain between 25 ppm to 500 ppm active ingredient.</td>
<td></td>
</tr>
<tr>
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<table>
<thead>
<tr>
<th><strong>SURFACTANTS AND RAW MATERIALS USED IN CONSUMER, HOUSEHOLD AND INSTITUTIONAL PRODUCTS:</strong></th>
<th><strong>0.033 – 0.167%</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>For preservation surfactants and raw materials supplied for the manufacture of industrial and consumer products.</td>
<td>0.33 – 1.67 LB / PER 1000 LBS FORMULATION</td>
</tr>
<tr>
<td><em>Not approved for this use in the State of California</em></td>
<td></td>
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<tr>
<th><strong>WATER BASED AGRICULTURAL PESTICIDE CONCENTRATES:</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>For preservation, ACTICIDE® L30 should be dosed at 280 to 1400 ml/cubic meter or 2.2 to 11.2 pints/1000 gallons based on the final formulation volume (100 to 500 ppm active ingredient).</td>
</tr>
<tr>
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"INDUSTRIAL RECIRCULATING WATER COOLING TOWERS AND EVAPORATIVE CONDENSERS:

ACTICIDE® L 30 may be dosed directly into the sump or basin or may be added by a suitable chemical pump. Where metering pumps are used, these must be set to deliver the required dose within 1 hour. The dosing point should be located close to the outlet from the basin to ensure rapid dispersal around the system.

ACTICIDE® L 30 may be dosed once or twice weekly at 70-280 ml/cubic meter or 0.56 – 2.2 pt/1000 gallons (25 to 100 ppm active ingredient) depending on the condition of the tower, the quality of raw water input and the amount of bleed off. Where contamination is heavy, more frequent dosing may be required. In heavily fouled systems, the tower should be drained and cleaned before treating with ACTICIDE® L 30.

*Not approved for this use in the State of California

INDUSTRIAL PROCESS WATER:

"Closed circuit machine cooling (injection molding, etc.) and stored (non-potable) water: to reduce the biofouling of pipework, heat exchangers, condenser tubes and to minimize microbially induced corrosion. Shock dosing into the sump/tanks of the process water system is preferred. Closed circuit systems require less frequent dosing.

In open systems shock dosing should be carried out on a once weekly to once monthly basis depending on the degree of contamination.

Initially dose at 140 ml/cubic meter, or 1.1 pt/1000 gallons (50 ppm active ingredient). When successful, dosing can be lowered to a minimum level equivalent at 10 ppm active ingredient. For intermittent treatment during routine maintenance use ACTICIDE® L30 at 100 ppm active ingredient and a contact time of at least one hour.

*Not approved for this use in the State of California

*Process Wash Waters: recommended for the control of bacteria and fungi in the storage of process wash waters.

Add 0.25 – 2.0 lb per 1000 lbs wash water (0.025% - 0.2%).

*Not approved for this use in the State of California

*AIR WASHER SYSTEMS / PAINT SPRAY BOOTHS:

For the effective control of bacterial growth and reduce buildup of deposits in air scrubbing units and paint spray booths.

Either shock dose or dose on a regular basis as an intermittent flush treatment during regular maintenance/cleaning.

FREQUENCY AND DOSE:

Shock dosing should be carried out on a regular basis. Heavily fouled systems may require twice weekly treatment. Light to moderate contamination will require once weekly to once monthly additions.

As an initial dose concentration add 1 pint per 1000 gallons water in system. When this treatment has been successful, add a minimum of 0.55 pints per 1000 gallons water in system.

For intermittent treatment of air scrubbing systems during routine maintenance/cleaning ACTICIDE® L30 should be used at 2.2 pints per 1000 gallons water in system.

*Not approved for this use in the State of California

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EPA Reg. No. 57071-75
Manufactured By/For: Thor GmbH
D-67346 Speyer, Germany
Tel. (06232) 6380

U.S. Office: Thor Specialties, Inc.
50 Waterview Dr., Shelton, CT 06484 USA
Tel. (203) 516-6980
# ACTICIDE® L 30

## INFORMATION SHEET

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## DIRECTIONS FOR USE

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### *PAPER MILL PROCESS WATER:

Apply at a convenient point early in the process system (machine chest, constant head box or backwater loop system).

**FREQUENCY AND DOSE:**

Shock dose one, twice or three times daily at 1 to 25 ppm a.i. in the process water. This equates to 30 to 700 ml (0.06 to 1.5 pt) per ton of finished paper or paperboard depending on the complexity of the system, quality of raw paper and type and degree of contamination.

*Not approved for this use in the State of California*

### *PAPER MILLS - BULK PULP:

Add ACTICIDE® L30 directly into the hydropulper, machine chest or stock chest.

**FREQUENCY AND DOSE:**

Apply ACTICIDE® L30 once weekly to once daily at between 150 and 560 ml per ton of stock or 1.1-4.4 pt/1000 gallons (50-200 ppm active ingredient) depending on the degree of contamination.

*Not approved for this use in the State of California*

### *SLIME CONTROL:

Shake Dosing: 70 to 260 grams (2 1/2 - 9 oz) of ACTICIDE® L 30 for each ton of paper produced per day should be added as a single daily shock dose, the actual quantity used depends on the severity of the slime problem. This addition may be made to any part of the stock preparation or backwater system.

Continuous addition: ACTICIDE® L 30 should be added continuously for either the single period of 8 hours during every 24 hours or for two separate periods of 4 hours during every 24 hours. ACTICIDE® L 30 should be metered at the rate of 195-230 grams (7-8.3 oz) for each ton of paper produced during the dosing period. This addition should be made to the recirculated backwater.

*Not approved for this use in the State of California*

### *OIL AND GAS FIELD FRACTURING WATER AND FLUIDS:

For the reduction of bacterial contamination of fracturing gels and fluids utilized in the oil and gas fields. ACTICIDE® L30 may be added to the fracturing water storage tank, during the mixing of fracturing fluids, or to the well head immediately before the injection of fracturing fluids.

**FREQUENCY AND DOSE:**

ACTICIDE® L30 should be added to the fracturing water storage tank as a slug dose once to twice per week, and should be used for each individual fracturing operation. Recommended use: 9-200 ppm (active ingredient).

*Not approved for this use in the State of California*

### *OIL RECOVERY SYSTEMS:

Drilling fluids, packer fluids, completion fluids (polysaccharide fluid loss control agents and thickeners including starch, guar, and xanthan gum) add 0.05% to 0.15% based on the fluid weight or 1.5% - 4.5% based on the dry polysaccharide weight

Subsurface injection waters including polymer and micellar/polymer waterfloors (thickeners including xanthan gum and polyacrylamides): add 0.015% to 0.15% based on solution weight

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**OIL FIELD WATERFLOODING WATER AND FLUIDS:**

For the control of bacterial contaminants of injection water and fluids used in waterflood and enhanced oil recovery. Add ACTICIDE® L30 to any base fluid or inject directly into the well head.

**FREQUENCY AND DOSE:**

ACTICIDE® L30 should be added as a slug dose once to twice per week, and should be used for each individual fracturing operation. Recommended use: 9-200 ppm (active ingredient).

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**OIL AND GAS FIELD PROCESS WATER AND FLUIDS:**

For the reduction of bacterial contamination of formation water produced by wells in the oil and gas fields. ACTICIDE® L30 should be injected in a single dose at any convenient point of the water-containing oil or gas stream, water-oil or water-gas separation, and produced water treatment.

**FREQUENCY AND DOSE:**

ACTICIDE® L30 should be added as a slug dose once to twice per week, and should be used for each individual fracturing operation. Recommended use: 67-200 ppm (active ingredient).

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**OIL AND GAS FLUIDS:**

This product may be used in terrestrial and off-shore drilling muds and packer fluids. Use for the in-can preservation of a wide range of gels and fluids including fracturing, enhanced oil recovery, injection, well squeeze, drilling, workover and completion fluids.

**FREQUENCY AND DOSE:**

Add ACTICIDE® L30 at 140-280 ml/cubic meter (1.1-2.2 pt/1000 gallons, or 0.047-0.093 pt/barrel) which is equivalent to 50-100 ppm active ingredient.

For well squeeze fluids add ACTICIDE® L30 at 70-560 ml/cubic meter or 0.56-4.5 pt/1000 gallons (25-200 ppm active ingredient).

*Not approved for this use in the State of California

**OIL AND GAS PIPELINE AND TANK MAINTENANCE:**

For use in water bottoms in crude and refined hydrocarbon storage tanks, piping and transportation systems. Inject ACTICIDE® L30 directly into the water bottom or pipeline, or add to the hydrocarbon phase.

**FREQUENCY AND DOSE:**

Treat once daily for pipeline maintenance to once every one or two months for both storage and transportation system.

Apply ACTICIDE® L30 at 70-560 ml/cubic meter, or 0.056-4.5 pt/1000 gallons of aqueous phase (25-200 ppm active ingredient). Higher levels may be added when dosing the hydrocarbon phase which will result in longer term protection by gradual diffusion into the water.

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