## BIOCHEK 410

An industrial preservative to inhibit the growth of bacteria, fungi and yeasts in aqueous paints, latex emulsions, metalworking fluids, pigment slurries, joint cements, household products and printing fluids.

### Precautionary Statements

**Hazard to Humans and Domestic Animals**

**Danger, Corrosive.** Causes irreversible eye damage. Do not get in eyes, on skin, or on clothing. Harmful if swallowed or absorbed through skin. Harmful if inhaled. Avoid breathing vapor or spray mist. Prolonged or frequently repeated skin contact may cause allergic reaction in some individuals. Remove contaminated clothing and wash before reuse.

Handlers must wear: Long-sleeved shirt and long pants; socks and shoes; goggles or face shield; Chemical resistant gloves (such as rubber or any waterproof material); and either a respirator with an organic vapor (OV) cartridge, or a canister with any N, P, R or HE prefilter or a dust/mist filtering respirator (MSHA/NIOSH) approval number prefix TC-21 or a NIOSH approved respirator with any N, P, R or HE prefilter.

Discard clothing or other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them. Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry.

**User Safety Recommendations**

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

**Environmental Hazards**

This product is toxic to fish and wildlife. Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans, or public 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 sewage treatment plant authority. For guidance contact your State Water Board or Regional Office of the EPA.

Do not mix with or store near oxidizing agents.

### In Case of Emergency, Call:

**CHEMTREC** 800-424-9300
**INTERNATIONAL** 703-527-3887

**EPA Reg. No.** 39967-39
**EPA Est. No.** 37869-PA-001

### Active Ingredients:

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>1,2-Dibromo-2,4-dicyanobutane</td>
<td>19%</td>
</tr>
<tr>
<td>1,2-Benzisothiazolin-3-one</td>
<td>6%</td>
</tr>
</tbody>
</table>

### Inert Ingredients: 75%

**TOTAL** 100%

### Directions for Use

It is a violation of Federal law to use this product in a manner inconsistent with its labeling. Do not apply in a way that will contact workers or other persons. The amount necessary for desired protection varies, depending on exposure conditions. For further application information refer to the Product Bulletin.

**Storage and Disposal**

Keep container closed when not in use. Do not contaminate water, food, or feeds by storage or disposal.

Ship and store Biochek 410 at temperatures between 0-42 °C (32-108 °F). Freezing the product may cause a temporary water separation, which can be corrected by mechanical agitation. Store away from heat. At temperatures above 42 °C (108 °F), the active ingredients in the dispersion may separate out.

**Pesticide Disposal:** Pesticide wastes are acutely hazardous. 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 label instructions, contact your State pesticide environmental control agency, or the hazardous waste representative at the nearest regional office for guidance.

**Container Disposal:** Nonrefillable container.

Do not reuse or refil this container. Offer for recycling if available or reconditioning if appropriate. Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, by incineration or, if allowed by State and Local authorities, by burning. If burned, stay out of smoke.

**The LANXESS Pittsburgh Emergency Response Telephone Number is 800-410-3036.**

*Biochek is a registered trademark of LANXESS Corporation*

**Net Contents:** 3 gal 122 fl oz (18kg)
**Lot No.:** NB16348022

LANXESS Corporation
111 RIDC Park West Drive • Pittsburgh, PA 15275-1112

**Label Text Date:** 1/9/2012 56101946

**Mix well before using this product.**
BIOCHEK 410
EPA Registration Number: 39967-39
BIOCHEK® 410
Industrial Preservative

PRODUCT BENEFITS
• Broad spectrum
• Excellent long-term preservation
• FDA approved
• Wide pH range (2.0 – 9.5)

GENERAL DESCRIPTION
BIOCHEK 410 is an industrial preservative which effectively inhibits the growth of bacteria, fungi and yeasts in aqueous systems including paints, adhesives, latex emulsions, metalworking fluids, pigment slurries, joint cements, household products, and printing fluids. BIOCHEK 410 is intended to protect products during storage. Chemically, BIOCHEK 410 is a 19% dispersion of 1,2-dibromo-2,4-dicyanobutane and 6% 1,2-benzisothiazolin-3-one, shown in order in the chemical diagram below. For a general description of the typical chemical and physical properties, see the BIOCHEK 410 Material Safety Data Sheet.

APPLICATION
The growth of microorganisms in aqueous systems during shipment, storage and handling can be detrimental to effectiveness. Such growth can affect such properties as odor, color, viscosity and introduce microbial growth into production equipment and processes. BIOCHEK 410 is effective in controlling such contamination and can improve the effectiveness and extent the life of materials treated if used according to the instructions given below.

TYPICAL LEVELS OF USE
Laboratory testing and customer use shows BIOCHEK 410 is typically effective when applied at concentrations shown. The exact amount necessary for the preservation of any given formulation will depend on the components, storage time, temperature, etc., and can be determined through actual testing coordinated by your LANXESS Corporation representative. All concentrations are based on the total formulation weight.

<table>
<thead>
<tr>
<th>Product Use Level</th>
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</thead>
<tbody>
<tr>
<td>Adhesives</td>
<td>500 – 8000 ppm</td>
</tr>
<tr>
<td>Latex Emulsions</td>
<td>500 – 8000 ppm</td>
</tr>
<tr>
<td>Metalworking Fluids</td>
<td>500 – 4000 ppm</td>
</tr>
<tr>
<td>Aqueous Paints</td>
<td>500 – 4000 ppm</td>
</tr>
<tr>
<td>Pigment Slurries</td>
<td>500 – 2000 ppm</td>
</tr>
<tr>
<td>Joint Cements</td>
<td>2000 – 8000 ppm</td>
</tr>
<tr>
<td>Household Products</td>
<td>500 – 4000 ppm</td>
</tr>
</tbody>
</table>

FDA STATUS AND APPROVALS
BIOCHEK 410 has FDA approval under 21 CFR 175.105, 176.170 and 176.180.
BIOCHEK 410 is approved by the German BGVV, Recommendation XXXVI.

DIRECTIONS FOR USE
It is a violation of Federal law to use this product in a manner inconsistent with its labeling.
Adhesives
BIOCHEK 410 is formulated to facilitate incorporate by pumping into the makeup water. BIOCHEK 410 can by incorporated by pouring if necessary. Where the adhesive is heated, BIOCHEK 410 should be added during the cool-down cycle to minimize any evaporative loss. Adhesives for which BIOCHEK 410 provides effective in-can preservation are starch, epoxy, polyester, polyvinyl acetate, styrene butadiene, methyl cellulose, acrylic, polyvinyl alcohol, hydroxyethyl cellulose, dextrin and casein. Such adhesives include, but are not limited to, those used in manufacturing process, construction projects, packaging materials.

Effective protection is achieved between 500 – 8000 ppm. Optimum effective concentration can vary with properties of the material being preserved. Testing to determine the appropriate level for your product is highly recommended.

Aqueous paints
BIOCHEK 410 is formulated to facilitate incorporate by pumping into the makeup water. BIOCHEK 410 can be incorporated by pouring if necessary. BIOCHEK 410 should be incorporated into the makeup water during the grind.

BIOCHEK 410 is an effective in-can preservative for all type of aqueous paints and coatings when used at levels of 500 – 4000 ppm. The optimum effective concentration can vary with properties of the material being preserved. Testing to determine the appropriate level for your product is highly recommended.

Latex emulsions
BIOCHEK 410 is formulated to facilitate incorporate by pumping into the makeup water. BIOCHEK 410 can be incorporated by pouring if necessary. Pump or pour using moderate agitation immediately following cool-down of the emulsion, and prior to pumping the emulsion into storage tank facilities. Latex emulsions that are preserved by BIOCHEK 410 include polyvinyl acetate, acrylic, vinyl acrylic and styrene butadiene. These emulsions are the raw materials used in the formulation of paints, adhesives, joint cements, pigments and household products.

Effective protection is achieved between 500 – 8000 ppm. Optimum effective concentration can vary with properties of the material being preserved. Testing to determine the appropriate level for your product is highly recommended.

Dispersed pigments
BIOCHEK 410 is formulated to facilitate incorporate by pumping into the makeup water. BIOCHEK 410 can be incorporated by pouring if necessary. Pump or pour using moderate agitation immediately following cool-down of the dispersed pigment and prior to pumping to the storage tank. BIOCHEK 410 is an effective in-can preservative to protect the pigment during handling, transportation and storage. Dispersed pigments are used to impart color to many products such as paints and coatings, adhesives and plastics.

Effective protection is achieved between 500 – 2000 ppm. Optimum effective concentration can vary with properties of the material being preserved. Testing to determine the appropriate level for your product is highly recommended.
**Household products and waxes, polishes, and inks**

BIOCHEK 410 is formulated to facilitate incorporate by pumping into the makeup water. BIOCHEK 410 can be incorporated by pouring if necessary. Incorporate by pumping or pouring with agitation into the makeup water blend. These products include, but are not limited to, dishwashing liquids, furniture and floor waxes and polishes, cleaners and treatment products and over-the-counter inks sold to custom color decorative household projects.

Effective protection is achieved between 500 – 8000 ppm. Optimum effective concentration can vary with properties of the material being preserved. Testing to determine the appropriate level for your product is highly recommended.

**Joint cements**

BIOCHEK 410 is formulated to facilitate incorporate by pumping into the makeup water. BIOCHEK 410 can be incorporated by pouring if necessary. Incorporate by pumping or pouring with agitation into the makeup water blend. These products include mortar-like sealers that are used to construct walls.

Effective protection is achieved between 2000 – 8000 ppm. Optimum effective concentration can vary with properties of the material being preserved. Testing to determine the appropriate level for your product is highly recommended.

**Metalworking fluids**

BIOCHEK 410 is formulated to facilitate incorporate by pumping, but can be poured. Pump or pour BIOCHEK 410 into the final diluted fluid either prior to its addition to the system at a level that will provide adequate protection in the diluted system, or after the system has been filled. BIOCHEK 410 should be thoroughly mixed into the system to assure efficacy. If BIOCHEK 410 is added to the concentrate, testing should be conducted to assure compatibility.

Effective protection is achieved between 500 – 4000 ppm. Optimum effective concentration can vary with properties of the material being preserved. Testing to determine the appropriate level for your product is highly recommended.

**Printing fluids**

BIOCHEK 410 is formulated to facilitate incorporate by pumping, but can be poured. Add to fluid concentrates during, or at the end of, mixing prior to filling at concentrations from 30 – 5000 ppm by weight. These printing fluids may be further diluted with water by printers so that the final concentration of BIOCHEK 410 is 10 – 2000 ppm by weight. This product includes all types of printing fluid products such as, but not limited to printing, copier and computer inks.

Optimum effective concentration should be determined by testing in your specific application.
COMPATIBILITY

*BIOCHEK 410* is compatible with typical ingredients in end-use formulations. However, it should be added separately from amine-containing and strong nucleophilic agents during product formulations. Mixing *BIOCHEK 410* with these agents may cause a reaction between the ingredients that can deactivate *BIOCHEK 410*.

*BIOCHEK 410* is most active over a pH range of 2.0-9.5. In some formulations, product has shown efficacy in higher pH formulations. If the formulation will have a final pH greater than 9.5, laboratory testing is recommended.

MATERIALS COMPATIBILITY

*BIOCHEK 410* is compatible with materials such as PVC, polyethylene, polypropylene, Tygon, Teflon and glass. *BIOCHEK 410* is corrosive to mild steel.

Positive displacement pumps are preferred for handling the product.

Recommended materials for pump “liquid ends” and piping include polyethylene, polypropylene, PVC, Kynar, Viton, or Hypalon.

STORAGE AND HANDLING

Read the label and MSDS for complete handling information before using this product.

PACKAGING

*BIOCHEK 410* is available in pails, drums and bins.

REMARKS

If you need assistance or information, please call your nearest LANXESS representative, or our Pittsburgh office at 800-LANXESS.

IN CASE OF EMERGENCY, CALL: CHEMTREC 1-800-424-9300
INTERNATIONAL (703)-527-3887

HAVE THE PRODUCT CONTAINER OF LABEL WITH YOU WHEN CALLING A POISON CONTROL CENTER OR DOCTOR OR GOING FOR TREATMENT.