

# PROMEXAL X50 PRESERVATIVE

A preservative for use in the manufacture of aqueous compositions

## PRECAUTIONARY STATEMENTS HAZARDOUS TO HUMANS AND DOMESTIC ANIMALS

### DANGER

Corrosive. Causes eye damage and skin irritation. May cause allergic skin reaction. Do not get in eyes, on skin or on clothing. Wear goggles or faceshield and rubber gloves when handling. Harmful or fatal if swallowed. Harmful if absorbed through the skin. Avoid contamination of food.

#### ENVIRONMENTAL HAZARDS:

This pesticide is toxic to highly 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 pollution 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.

EPA REG. NO. 10182-385  
EPA EST. NO. 33909-EN-4

#### NOTE TO PHYSICIAN:

2-Methyl-4, 5-Trimethylene-4-Isothiazolin-3-One..... 5%  
Inert Ingredients ..... 95%

### KEEP OUT OF REACH OF CHILDREN

## DANGER

#### STATEMENT OF PRACTICAL TREATMENT:

Wash thoroughly with soap and water after handling. In case of contact, immediately flush eyes or skin with plenty of water for at least 15 minutes. For eyes call a physician. Remove and wash contaminated clothing before reuse. If swallowed, drink promptly large quantities of water. Avoid alcohol. Call a physician immediately.

#### NOTE TO PHYSICIAN:

Possible mucosal damage may contraindicate the use of gastric lavage.

SEE ADDITIONAL PRECAUTIONS ON SIDE PANEL

#### DIRECTIONS FOR USE:

It is a violation of federal law to use this product in a manner inconsistent with its labeling. See T.I. Bulletin for directions for use.

#### STORAGE AND DISPOSAL:

**PROHIBITIONS:** Do not contaminate water, food, or feed by storage or disposal. Open dumping is prohibited.

**STORAGE:** Protect from frost. If frozen, allow to thaw and stir well before use.


**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 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, puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

CONTENTS: 440.9 LBS. NET MINIMUM  
APPROX. 55 U.S. GALLONS

MANUFACTURED BY:

MADE IN UNITED KINGDOM



ACCEPTED

MAY 14 1991

**ZENECA Bigcides**  
Wilmington  
Delaware 19850-5457 USA  
(302) 886-3000  
A business unit of Zeneca Inc.

PRODUCT CODE:  
84250

1661 + 1 AMM  
14 1991

Under the Federal Insecticide, Fungicide, and Rodenticide Act as amended, for the pesticide, registered under EPA Reg. No. 10182-385

PROMEXAL is a registered trademark of Zeneca Inc.

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## PROMEXAL<sup>®</sup> X50 Preservative

### Technical Information Bulletin

#### SUMMARY

PROMEXAL<sup>®</sup> X50 preservative, an aqueous solution of 2-Methyl-4,5-Trimethylene-4-Isothiazolin-3-one (MTI), is an efficient preservative for aqueous compositions such as oil in water emulsions, latices, emulsion paints, water based adhesives, casein and rosin dispersions, textile spin-finish solution, aqueous slurries, titanium dioxide slurries and tape joint compounds.

PROMEXAL X50 is registered with the Environmental Protection Agency and has been granted EPA Registration No. 10182-385.

#### GENERAL

Many aqueous dispersions and emulsions can be seriously impaired during storage and use due to the growth of bacteria and fungi such as:

<i>Staphylococcus aureus</i>	<i>Escherichia coli</i>
<i>Acinetobacter calcoaceticus</i>	<i>Enterobacter cloacae</i>
<i>Micrococcus luteus</i>	<i>Pseudomonas fluorescens</i>
<i>Klebsiella pneumoniae</i>	<i>Proteus rettgeri</i>
<i>Bacillus subtilis</i>	<i>Cladosporium herbarum</i>
<i>Aspergillus niger</i>	<i>Phoma violacea</i>
<i>Pseudomonas aeruginosa</i>	<i>Candida albicans</i>
<i>Aeromonas hydrophila</i>	<i>Rhodotorula rubra</i>
<i>Streptococcus faecalis</i>	<i>Serratia marcescens</i>
<i>Fusarium solani</i>	<i>Aureobasidium pullulans</i>
	<i>Penicillium rubrum</i>

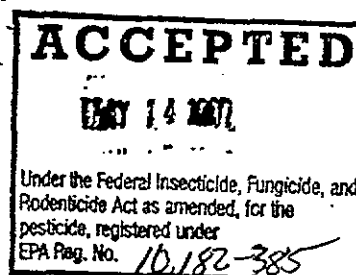
PROMEXAL X50 is an effective preservative against growth of the above microorganisms in the aqueous systems indicated and exhibits:

- Effective control of a wide range of organisms at economic concentrations.
- Long-term storage stability.
- Ease of use due to its liquid form and excellent compatibility in most aqueous systems.

#### PROPERTIES OF PROMEXAL X50

Composition: A solution of 2-Methyl-4,5-Trimethylene-4-Isothiazolin-3-one (MTI) at 5% in water.

Physical Form and Appearance: Clear golden brown liquid  
Viscosity (20°C):  $1.444 \times 10^{-3}$  Pascal Seconds  
pH, 5% (20°C): 4.8 (approx.)  
Relative Density (25°C): 1.02 lb/gal (approx.)



**DIRECTIONS FOR USE**

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

PROMEXAL X50 is an effective preservative in most aqueous compositions. Typical applications, and the suggested range of concentrations on which trials can be based, are:

Product	% PROMEXAL X50 (based on total weight of product)
Latices: Polymer latices based on acrylate, butadiene, PVA and styrene for various applications.	0.05-0.30
Oil-in-water emulsions: "Spin finish" solutions for use in the textile industry. Cutting/rolling oils. Soluble oils (metal and engineering industries).	0.025-0.20
Emulsion paint: For in-can preservation.	0.025-0.15
Process rinse waters: washwater use to clean equipment storage tanks, printing heads, mixing vessels, etc.	0.025-0.10
Adhesives: (non-food contact only) Carboxymethylcellulose (CMC) and derivatives, animal glues, adhesives based on gelatins and latex.	0.10-0.30
Paper coating compositions: (non-food contact only) Rosin dispersions. Starch and casein based products.	0.025-0.30
Aqueous Mineral Slurries: TiO2 and Calcium carbonate.	0.05-0.15
Tape joint compounds: wallboard, spackling and drywall joint products.	0.05-0.15
Aqueous based inks:	0.025-0.20
Aqueous Industrial or Household Chemicals:	0.01-0.30

**GENERAL RECOMMENDATIONS**

The concentration required to give protection depends on several factors. These include the susceptibility of the system to microbiological degradation, the extent to which micro-organisms can gain access, the species involved, pH, temperature, and length of time for which protection is required.

For protection against bacterial attack, a concentration within the range 0.025%-0.30% PROMEXAL X50 is almost invariably sufficient.

The control of mold growth, especially on paste products, may occasionally demand dosages above 0.30%.

**KEEP OUT OF REACH OF CHILDREN**

**DANGER**

*Precautionary Statements*

**HAZARDS TO HUMANS AND DOMESTIC ANIMALS**

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**ENVIRONMENTAL HAZARDS**

**CAUTION:** This product is toxic to highly 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.

**STORAGE AND DISPOSAL**

*Prohibitions*

Do not contaminate water, food, or feed by storage or disposal. Open dumping is prohibited.

*Storage*

Protect from frost. If frozen, allow to thaw and stir well before use.

*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 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 by other procedures approved by state and local authorities.

**SAFE HANDLING INFORMATION**

Refer to the Material Safety Data Sheet (MSDS) available from ZENECA Biocides for information on the safe use, handling and disposal of this product.

For literature, samples and order information, please contact Customer Services: 800-523-7391.

For technical information, please contact

ZENECA Biocides  
1800 Concord Pike  
ARTS Building  
Wilmington, DE 19897  
800-456-3669 extension 2055

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**FOR YOUR PROTECTION**

ZENECA Inc. ("ZENECA") 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 ZENECA'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 ZENECA, and the buyer or user assumes the risk of any such use. ZENECA DISCLAIMS ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING ANY WARRANTY OF

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described therein are not to be construed as recommending the infringement of any patent and no liability for infringement arising out of any such use is assumed.

**ZENECA Biocides**

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