

**PRECAUTIONARY  
STATEMENTS**

**HAZARDS TO HUMANS**

**DANGER**

Corrosive. Causes irreversible eye damage. May be fatal if absorbed through skin. Causes skin irritation. Do not get in eyes, on skin, or on clothing. Harmful if swallowed or inhaled. Avoid breathing vapor or spray mist. Wear goggles, face shield or safety glasses, protective clothing and rubber gloves. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash before reuse.

**STATEMENT OF PRACTICAL TREATMENT**

**IF IN EYES:** Hold eyelids open and flush with a gentle, steady stream of water for 15 minutes. Get medical attention.

**IF ON SKIN:** Wash with plenty of soap and water. Get medical attention.

**IF SWALLOWED:** Call a physician or poison control center. Drink promptly a large quantity of milk, egg white or gelatin mixture, or, if these are not available large quantities of water. Avoid alcohol. Do not give anything by mouth to an unconscious person.

**IF INHALED:** Remove victim to fresh air. If not breathing, give artificial respiration, preferable mouth to mouth. Get medical attention.

**NOTE TO PHYSICIAN:** Probable mucosal damage may contraindicate the use of gastric lavage.

**ENVIRONMENTAL HAZARDS**

This product is toxic to fish. Do not apply directly to water or wetlands. Do not contaminate water when disposing of equipment washwaters.

**PHYSICAL AND CHEMICAL HAZARDS**

Do not use or store near heat or open flame.

**TROYSAN®  
POLYPHASE® AF1**

A FUNGICIDE FOR USE IN AQUEOUS AND SOLVENT SYSTEMS SUCH AS OIL-FRESHENERS AND LATEX PAINTS, WOOD PRODUCTS, CUTTING OILS, TEXTILES, PAPER COATINGS, INKS, PLASTICS, ADHESIVES, AND CANVAS AND COUPLAGE

E.P.A. REG. NO. 5383-63  
E.P.A. EST. NO. 5383-NJ-1  
INDUSTRIAL FUNGICIDE

ACTIVE INGREDIENT:  
2-Iodo-2-Propynyl Butyl Carbamate.....40%  
INERT INGREDIENTS.....60%  
TOTAL.....100%

KEEP OUT OF REACH OF CHILDREN

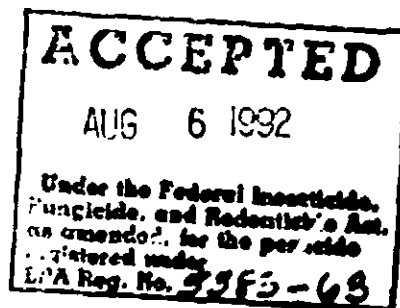
**DANGER**

SOLD FOR INDUSTRIAL USE ONLY

SEE SIDE PANEL FOR ADDITIONAL PRECAUTIONARY STATEMENTS

**TROY CHEMICAL CORPORATION**  
ONE AVENUE L NEWARK, NEW JERSEY 07105

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**DIRECTIONS FOR USE**

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

**APPLICATION:**

Troysan® Polyphase® AF1 is sold for industrial use only. It should be used only in the areas listed in accordance with the instructions provided in the Technical Bulletin.

**STORAGE AND DISPOSAL**

**STORAGE:** This material has a tendency to crystallize at low temperatures. Storage temperatures below 90°F (32°C) and above 32°F (0°C) are recommended.

**PESTICIDE DISPOSAL:** Pesticide wastes are acutely hazardous. Improper disposal of excess pesticides, 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. Do not contaminate water, food, or feed by storage or disposal.

**CONTAINER DISPOSAL:** Triple rinse (or equivalent) and offer for recycling, or reconditioning, or dispose of in a sanitary landfill, or other approved State and local procedures.

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7/20/92

**TROYSAN® POLYPHASE® AF1** is a broad spectrum, liquid, non-metallic fungicide which is effective against a wide variety of fungal organisms. It may be used to protect both interior or exterior coatings from the growth of fungal organisms on the film surface. It may also be used as a fungicide in cutting oils, textiles, paper coatings, inks, plastics, adhesives, and canvas and cordage. It is also recommended as a wood preservative, for use in above ground applications.

#### USES:

The following are recommended use levels for **TROYSAN® POLYPHASE® AF1**. All recommendations are in percentage by weight, and refer to the product **TROYSAN® POLYPHASE® AF1**. Typical use levels are given for the various applications to indicate the approximate levels for a particular application. In order to determine the most cost effective use level for **Polyphase® AF1** in a given end use, field trials are suggested.

#### PAINTS AND STAINS:

**TROYSAN® POLYPHASE® AF1** will generally impart protection when used at levels of between 4 to 12 pounds per one hundred gallons based on the total formula weight. More may be required in hot, humid areas where mildew is a particularly severe problem, up to a maximum of twenty pounds per one hundred gallons.

For interior paints, because of the reduced fungal hazard, levels of one to four pounds per one hundred gallons will usually be adequate.

For wood protective stains which are used in

recommended, depending on the type of protection desired. If protection against wood destroying fungi are required, then a level of 12 pounds per hundred gallons is sufficient. If protection against blue stain and mold are required, then a level of 8 to 10 pounds per hundred gallons is sufficient.

**TROYSAN® POLYPHASE® AF1** should be added with good agitation at the end of the manufacturing cycle.

#### PLASTICS:

**TROYSAN® POLYPHASE® AF1** may be used in polyvinyl chloride plastics to prevent surface mildew growth on items such as shower curtains, tarpaulins, umbrellas, etc. Levels of 0.5-2.5% by weight of the plastic are generally adequate. It is recommended that **Polyphase® AF1** be dispersed in the plasticizer before it is incorporated into the resin. (Use of **Polyphase® AF1** is not recommended if processing entails treatment above 350°F for prolonged periods of time, nor should it be used in a polyvinyl chloride plastic that will be in contact with food.)

#### CUTTING OILS:

**TROYSAN® POLYPHASE® AF1** may be used in metal-working fluids to prevent fungal growth at concentrations of 0.05-0.5%. It should be added to the cutting fluid concentrate in amounts sufficient to yield the desired concentration in the diluted composition.

It is recommended that biocide levels be checked periodically as many cutting oils are unstable upon standing.

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## WOOD:

**TROYSAN® POLYPHASE® AF1** may be applied in solvent solutions or aqueous dispersions to new lumber, plywood, particle board, millwork, etc., to prevent the growth of mildew, sapstain, and wood destroying fungi. Polyphase is recommended for use on wood in above ground use only. Treating solutions may be prepared by diluting Polyphase® AF1 in organic solvents or by creating a water emulsion. Levels of 0.5-2.0% Polyphase® AF1 are suggested depending on the type of protection required, severity of conditions for the end use, and the duration of time protection is required. All products should be field tested in order to insure that the most effective level of Polyphase® AF1 is being used.

## SAPSTAIN CONTROL

For the prevention of the growth of blue stain and mold fungi on freshly sawn lumber, a concentration of 0.5% active ingredient is suggested as a starting level. Formulations will usually be based on aqueous dispersions and emulsions. Lumber should be dipped for a duration of one to three minutes in order to achieve the maximum penetration into wood. For best results lumber should be treated within 24 hours after it is sawed.

## MILLWORK

**TROYSAN® POLYPHASE® AF1** is also recommended for use on millwork, including door and window frames, exterior siding, composite board, plywood and other construction lumber when it is important to prevent the growth of mildew, blue stain, and wood destroying fungi.

Wood treated with Polyphase® AF1 does not change in appearance and may be painted when dry.

For applications of this type, Polyphase® AF1 may be applied from either organic solvent or water based formulations. These formulations may be applied by either dipping, spraying, or brushing. Suggested use level of Polyphase® AF1 is 8-12 pounds per hundred gallons based on formula weight, depending on the type of protection desired. For protection against wood destroying fungi, a level of 12 pounds per hundred gallons is sufficient. For protection against blue stain and mold fungi,

a level of 8-10 pounds per hundred gallons is sufficient. Polyphase® AF1 is not recommended for wood surfaces which come into direct contact with food.

## TEXTILES:

**TROYSAN® POLYPHASE® AF1** may be used as a mildewcide in both aqueous and solvent based coatings or dyes which are applied to the textile material. Typical end use of these materials are in such areas as carpets, canvas and cordage, drapes, shower curtains, etc. Polyphase® AF1 should not be used in fabrics for human wear. Polyphase® AF1 should be added at the end of the production cycle of the coating or dye.

Polyphase® AF1 will normally impart protection to the substrate when added at levels of 0.1-1.0% based on the total formula weight.

## PAPER COATINGS:

**TROYSAN® POLYPHASE® AF1** may be used as a mildewcide in both aqueous and solvent based coatings which are applied to paper. Examples of such paper coatings are: corrugated cardboard and soap wrappers. Polyphase® AF1 should be added at the end of the manufacturing cycle of these coatings with good agitation.

Polyphase® AF1 will generally impart protection to the substrate when added at a level of 0.05-0.3% based on the total weight of the formulation.

## CANVAS AND CORDAGE:

**TROYSAN® POLYPHASE® AF1** may be used as a mildewcide in both aqueous and solvent based formulations which coat canvas and cordage substrates. Polyphase® AF1 should be added at the end of the production cycle of the coating with good agitation.

Polyphase® AF1 will generally impart protection to the substrate when added at levels of 0.5-2.0% based on the formula weight.

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**INKS:**

TROYSAN<sup>®</sup> POLYPHASE<sup>®</sup> AF1 may be used in aqueous based ink solutions for protection of these solutions against the attack of fungal organisms. It is recommended that Polyphase<sup>®</sup> AF1 be added at the end of the production cycle.

Polyphase<sup>®</sup> AF1 will generally impart protection when used at levels of 0.05-3.0% based on the formula weight.

**ADHESIVES:**

TROYSAN<sup>®</sup> POLYPHASE<sup>®</sup> AF1 can be used as an additive to caulk and adhesive formulations to prevent the growth of fungal organisms in the material in both the wet stage and once the film has dried.

Recommended levels are between 0.05-0.2% based on the formula weight. Polyphase<sup>®</sup> AF1 should be added toward the end of the production cycle with good agitation.

**STORAGE AND HANDLING:**

TROYSAN<sup>®</sup> POLYPHASE<sup>®</sup> AF1 should not be stored at temperatures below 32°F.

Store drums in an upright position with all bungs tightly closed. Do not reuse empty drums. Dispose of in accordance with local standards. Complete safety and handling information will be found in the MSDS.

**NOTE:**

The information and data given herein are based upon tests and reports considered to be reliable, and are believed to be accurate, but are in no way guaranteed. No warranty, expressed or implied is made or intended. The adoption for use should be based upon the customer's own investigations and appraisal, and no recommendation should be construed as an invitation to use material in infringement of patents.

**PACKAGING:**

5 gallon pails  
15 gallon kds  
55 gallon drums  
totes

50 lbs. net  
125 lbs. net  
500 lbs. net  
2,200 - 3,000 lbs. net

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Actual net contents is stencilled on container.

**TYPICAL PROPERTIES:**

Active Ingredient: .....	40% min. 3-iodo-2-propynyl butyl carbamate
Appearance: .....	Amber mobile liquid
Color (Gardner): .....	9 maximum
Specific Gravity 25°C: .....	1.1-1.2
Lbs./Gal.: .....	9.4-9.7
Odor: .....	Characteristic
Solubility: .....	Soluble in aromatics and alcohols. Dispersible in aqueous and solvent based paints.

**NOTE:** The above typical properties are not to be considered as purchase specifications.

# TROY PRODUCTS

## TROYSAN® FUNGICIDES and BACTERICIDES

A complete line of nonmercurial preservatives, for any application. Troysan® Polyphase,® a patented, versatile metallic fungicide.

## TROYTHIX™ RHEOLOGY MODIFIERS

A full range of rheology agents for solvent systems. Products include Troythix™ 42BA, a high-efficiency viscosity builder; and Troythix™ XYZ, the industry's standard thixotrope.

## TROYSOL™ DISPERSANTS and SURFACTANTS

A broad range of surface-active compounds for aqueous and non-aqueous systems. Troysol™ AFP, the original antifoat, antislaking additive, Troysol™ 98C, a unique amphoteric surfactant, and Troysol™ Q148, a specially-formulated flow control agent for aqueous systems are three of the more than fifteen specialty additives that make up the Troysol™ line.

## TROYKYD® DRIER STABILIZERS

TROYKYD® PermaDry is an effective lead-free feeder drier that maintains drying efficiency in systems containing high surface-area pigments, such as carbon black, where conventional driers are preferentially absorbed on the pigment surface, causing loss of dry.

## TROYKYD® ANTISKINNING AGENTS

Troykyd® AntiSkin B is the workhorse of the industry. Troykyd® AntiSkinning Agents can meet any need that presents itself.

## DRIERS AND CATALYSTS

Metallic soap driers offered in a wide variety of metal contents.

- Troymax™ — A high quality synthetic drier
- Troykyd® — The conventional naphthenates
- Troykyd® WD — Water-dispersible driers

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## TROYKYD® DEFOAMERS

Nine specially-formulated defoamers to meet almost any application need. Troykyd® D126, a powdered defoamer for high pH systems, Troykyd® D999, a widely used general purpose defoamer, and Troykyd® D44, a particle free, high potency defoamer are a few offerings in the Troykyd® Defoamer series.

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