



EPA Reg. No.: 5383-191  
Product Code: 12141

## POLYPHASE® PW30

Fungicide for Use in Aqueous Systems

### Description

Polyphase® PW30 is an easy to dispense, low viscosity, VOC-free & formaldehyde free, waterborne 30% dispersion of IPBC.

### Application & Use

Test fence data consistently demonstrates that Polyphase PW30 provides durable protection against a wide variety of fungi and yeast including *Alternaria* and the fungi which affect the coatings and cause premature film failure and decay of wood.

Polyphase PW30 is designed for traditional waterborne systems including paints, stains, adhesives, and wood preservatives.

The preservative provides a durable system protection in exterior applications. Polyphase PW30, in addition to exterior applications, is recommended for coatings applied in kitchens, baths, basements and other damp environments.

### Product Highlights

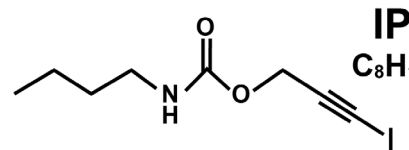
- Broad-spectrum fungicide
- Prevents premature film failure
- Effective against mildew, fungal stain, and rot
- Zero VOC
- Rapid dispensing, waste reduction, no heel
- Broad compatibility
- Stable in coatings systems pH 3- 10
- Suitable for white or tinted systems
- In-can control of fungi & yeast

### Physical Properties

The following are typical properties of Polyphase PW30; they are not to be considered product specifications.

Appearance: .....	White to off-white dispersion
Specific Gravity, 25°C:.....	1.31
pH (as is) .....	6.5
Viscosity, 25°C .....	400

### Active Substance

<b>30%</b>	<b>3-Iodo-2-Propynyl Butyl Carbamate</b>	 <p><b>IPBC</b> <b>C<sub>8</sub>H<sub>12</sub>INO<sub>2</sub></b></p>
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## Antimicrobial Activity

Fungi	MIC
<i>Alternaria alternata</i>	5
<i>Aspergillus niger</i>	5
<i>Aspergillus versicolor</i>	2
<i>Aureobasidium pullulans</i>	2
<i>Ceratocystis pilifera</i>	2
<i>Cladosporium cladosporioides</i>	5
<i>Cladosporium herbarum</i>	5
<i>Penicillium species</i>	2

\*Minimum inhibitory concentration (MIC) is an indication of which microorganisms can be controlled by a preservative and the concentration at which growth of the test organism is inhibited under laboratory conditions. MIC values are expressed in parts per million (ppm). The lower the MIC value in ppm, the greater the product's effectiveness. MIC values should only be used for relative comparisons. Practical use concentrations are generally much higher and should be established through field tests and actual use.

## Function/Activity

Suggested use levels are based on laboratory and field evaluations and are typical for the use areas indicated. The actual level of **Polyphase® PW30** required for your system is formulation specific. The selection of the individual components of the formulation, the PVC level, the substrate to be coated, and the environment in which the coating will be exposed all have an influence on the amount of protection needed. Suggested use levels should be verified by field trials of the end-use product. Suggested use levels are reported as percentage weight/weight in the final use product. The following suggested use levels are for common applications and are not exclusive of other uses for Polyphase PW30.

	% Wt/Wt
Canvas & cordage .....	0.7-2.7%
Paints and coatings .....	0.53-1.6%
Wood protective stains .....	1.1 – 1.6%
Adhesives .....	0.08 – 0.8%
Paper Coatings (for non-food use) .....	0.07 – 1.0%
Plastics .....	0.7-3.3%
Inks .....	0.07-4.0%
Textiles .....	0.13-1.3%

Troy's Microbiological Laboratory is available to provide additional assistance in determining the proper level of protection needed for your system.

### Paints and Coatings

Polyphase PW30 controls a variety of fungal species in water-based paints and coatings. In hot, humid areas where fungi are a particularly severe problem, the upper application levels are suggested. Polyphase PW30 should be added with good agitation at the end of the manufacturing cycle (see Formulation Notes).

### Wood Protective Stains (water-based)

Polyphase PW30 offers broad-spectrum protection against the discoloration of the protective film due to blue stain or mold. Polyphase PW30 does not change the appearance of wood or have any influence on its coatability. Polyphase PW30 is recommended only for pigmented wood stains with solid content of at least 12%. For clear and semi-transparent stains, performance testing should be conducted to ensure that Polyphase PW30 does not affect the transparency of the final coating.

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## Adhesives

**Polyphase® PW30** can be used as an additive to prevent growth of fungal organisms in uncured and cured adhesives. Adhesives systems containing starches, casein, animal fats, natural oils, or proteins are susceptible to degradation caused by fungi/yeast. Polyphase PW30 should be added toward the end of the production cycle with good agitation.

## Formulation Considerations

Polyphase PW30 should be added with good agitation at the end of the manufacturing cycle after pH adjustments have been made (not during the grind). Polyphase PW30 is compatible with most acrylic, vinyl acrylic, and styrenated acrylic polymer emulsions. Under severe conditions in exterior applications and at higher use levels than recommended, temporary discoloration may occur. Due to various possibilities of application and different methods of processing, it is advised to check compatibility in the development of new products. Please contact your Troy representative for assistance.

## Shipping & Packaging

Polyphase PW30 is packaged in:

Shipping Container	Net Weight
Drum	441 lbs. / 200 kg.
Tote	2205 lbs. / 1000 kg.

## Product Safety & Additional Information

For handling, storage, health, and safety information and disposal procedures, as well as additional information, please refer to the Safety Data Sheet (SDS) and product label.

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