

POLYPHASE® 641

Dry-Film Preservative

**Paints & Coatings
& Material Protection/US**

EPA Registration No.: 5383-112

Polyphase® 641 is a solvent-based fungicide developed to provide enhanced chemical stability in solvent-based formulations containing driers, raw oils, and/or transition metal pigments. Polyphase® 641 is an effective full-spectrum fungicide.

Application & Use

Polyphase® 641 offers excellent fungal protection in paints and wood protective stains. Polyphase® 641 also provides fungal control in wood preservative formulations and in other industrial applications. It is particularly suited for solvent-based systems that contain driers, transition metal pigments, and/or raw oils.

This product is suitable for systems with a pH of <9 and at a temperature up to <60°C.

Product Highlights

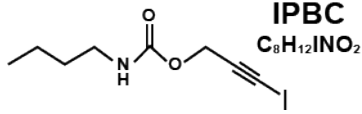
- Enhanced stability in both clear & pigmented systems
- Typically non-corrosive
- Water- & solvent-based system compatibility

Physical Properties

The following are typical properties of Polyphase® 641; they are not to be considered product specifications.

Appearance:	Clear pale yellow liquid
Specific Gravity,	1.17
Odor	Mild characteristic
% Active	20.0

Active Substance

20.0%	3-Iodo-2-propynyl butyl carbamate	 <p>IPBC C₈H₁₂INO₂</p>
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Function/Activity

The following suggested use levels are based on laboratory tests and are typical for the applications indicated. The actual level required for your system is formulation specific. The selection of the individual components of the formulation, 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 are reported as percentage of the end-use product.

Paints and Coatings

Polyphase® 641 has been shown to provide excellent fungal control as well as enhanced chemical stability in solvent and waterborne paints and coatings. In hot, humid areas where fungi are a particularly severe problem, the higher application levels are suggested. Polyphase® 641 should be added with good agitation at the end of the manufacturing cycle.

Wood Protection

Polyphase® 641 offers protection against fungi when formulated in organic solvent-based wood protection systems.

Organic Solvent-Based Systems

Polyphase® 641 contributes the added benefit of co-solvency when incorporated into organic solvent-based formulations. If additional co-solvent is needed, glycol ethers are suggested.

Wood Protective Stains

Polyphase® 641 offers protection against discoloration due to fungi. Polyphase® 641 does not change the appearance of wood or have any influence on its coatability. Polyphase® 641 offers improved stability in wood protection formulations in the presence or absence of pigments for an extended period of time.

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Function	% Wt/Wt
Paints & Stains	0.50 - 1.50%
Cutting Oils	0.15 - 0.50%
Wood	2.50 - 6.00%
Adhesives	0.13 - 0.50%
Inks	0.25 - 2.50%
Paper Coatings	0.25 - 1.00%

Formulating Considerations

Polyphase® 641 can be added to formulations at any stage of the manufacturing process. Polyphase® 641 performs best at pH values below 9, at temperatures below 60°C, and in the absence of strong reducing or oxidizing agents. Degradation of the active ingredient in this formulation can cause yellowing in certain formulations. Polyphase® 641 is not recommended for use in highly aliphatic systems. Polyphase® 641 is formulated mainly for use in solvent-based systems but use in certain water-based systems is possible.

All suggested use applications should be evaluated for final product efficacy, color uniformity, and for pH, temperature, and storage stability prior to commercialization. White and light colored exterior paints should be checked for color stability on exposure.

Metal containers for formulated products should always be lined. Do not store formulated products for prolonged periods in iron or steel containers.

Due to various possibilities of application and different methods of processing, it is advised to check compatibility in the development of new products. Contact your Arxada representative for assistance.

Shelf-life is 24 months from date of manufacture.

Packaging

Polyphase® 641 is packaged in:

Package Type	Net Weight
Pail	40 lbs / 18 kg
Small Drum	110 lbs / 49.9 kg
Large Drum	441 lbs / 200 kg
Tote	2300 lbs / 1043.3 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 label.



For more information visit:
www.arxada.com

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