

Polyphase® 678 is a full spectrum, zero VOC dry-film fungicide dispersion offering protection against the growth of mold and mildew. Polyphase® 678 uses a synergistic combination of actives that outperforms many single active based formulations.

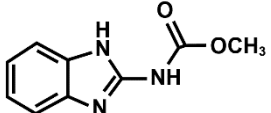
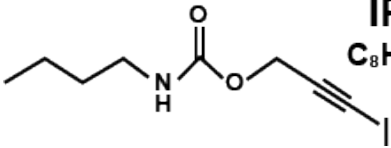
### Application & Use

Polyphase® 678 offers excellent antifungal protection in exterior and interior paints, masonry coatings, stucco, paper coatings, paper products, and wood protective stains. Polyphase® 678 also provides excellent control in preventing fungal growth in textile and other industrial applications. The preservative's primary application is in water-based products, especially those in which Volatile Organic Compounds (VOCs) are a major concern.

### Product Highlights

- Full-spectrum protection
- Highly effective against a variety of fungal organisms
- Zero VOC and APEO-free
- Does not chalk on exposure
- Color stable in white paint

### Active Substance

15.0%	Methyl 2-benzimidazolecarbamate	BCM	 <p><b>BCM</b> C<sub>9</sub>H<sub>9</sub>N<sub>3</sub>O<sub>2</sub></p>
5.0%	3-Iodo-2-propynyl butyl carbamate	IPBC	 <p><b>IPBC</b> C<sub>8</sub>H<sub>12</sub>INO<sub>2</sub></p>

### Physical Properties

The following are typical properties of Polyphase® 678; they are not to be considered product specifications.

<b>Appearance:</b>	White flowable dispersion
<b>Specific Gravity, 25°C:</b>	1.18
<b>pH (as is)</b>	7.5
<b>Viscosity, 25°C</b>	450

### Formulating Considerations

All end-use applications should be evaluated for final product efficacy, color uniformity, pH, temperature, and storage stability prior to commercialization. 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 12 months from date of manufacture.

## 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 & Coatings

Polyphase® 678 has been shown to be an excellent control agent against 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® 678 should be added with good agitation at the end of the process. Polyphase® 678 offers a full spectrum of antifungal protection and does not change the appearance of wood or have any influence on its coatability. Polyphase® 678 is suggested only for pigmented wood stains.

## Paper

For paper coatings via application into a size-press, water box, wet-stack (wet web), or dry-stack application, a dose rate of 0.05 to 2.00% based on the total weight of the treating solution is typical. For paper products via application into a fiber slurry or white water, a dose rate of 0.10 – 1.50% based on the final manufactured paper weight is typical. Polyphase 678 is not to be used in formulations intended for food contact paper coatings or food contact adhesive uses.

Function	% Wt/Wt
Interior & Exterior Paints & Stains	0.50 - 2.30%
Wood Protective Stains	0.30 - 1.50%
Adhesives, Caulks, Grouts & Sealants	0.30 - 1.50%
Joint Cements	0.50 - 1.50%
Masonry	0.50 - 1.50%
Roof Coatings	0.70 - 3.00%
Stucco & EIFS Coatings	0.50 - 1.50%
Inks	0.30 - 1.50%
Textiles	0.30 - 2.00%

## Packaging

Polyphase® 678 is packaged in:

Package Type	Net Weight
Pail	45 lbs / 20.4 kg
Small Drum	110 lbs / 49.9 kg
Large Drum	441 lbs / 200 kg
Tote	2500 lbs / 1133 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](http://www.arxada.com)

**Use biocides safely. Always read the label and product information before use.** All product information corresponds to Arxada's knowledge on the subject at the date of publication, but Arxada makes no warranty as to its accuracy or completeness and Arxada assumes no obligation to update it. Product and safety information is intended for use by recipients experienced and knowledgeable in the field, who are capable of and responsible for independently determining the suitability of ingredients for intended uses and to ensure their compliance with applicable law. Proper use of this information is the sole responsibility of the recipient. Republication of this information or related statements is prohibited. Information provided by Arxada is not intended and should not be construed as a license to operate under or a recommendation to infringe any patent or other intellectual property right. No claims are made herein for any specific intermediate or end-use application. The information contained in this document is proprietary and confidential. The recipient shall keep this document strictly secret using at least the same level of measures as it uses to protect its own confidential information, but in any case at least commercially reasonable own confidential information, but in any case at least commercially reasonable and

customary efforts. The recipient shall use this document only for the purpose specified in the applicable contractual documentation between the recipient and Arxada and will not make any use of it for its own separate benefit or the benefit of any third party. The use by other persons or entities than the intended recipient is prohibited. If you receive this transmission in error, please contact Arxada immediately and delete this document and its attachments from your system. Upon termination of the applicable contractual relationship between the recipient and Arxada, the recipient shall return or destroy promptly this document. Recipient shall at any time be fully liable for any and all breaches of the confidentiality duty and indemnify Arxada for any damages derived thereunder. Recipient acknowledges that the information provided is considered a trade secret and therefore the duty of confidentiality must remain in force for an undetermined period of time, regardless of any prior contractual agreement with Arxada. All trademarks belong to their respective owners or to Arxada as acknowledged.

© 2023 Arxada Ltd.