

5383-91

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# Technical Data [Sheet] [Bulletin]

**ACCEPTED**

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## Troysan® Polyphase® 604

 Broad Spectrum Fungicide  
 EPA Reg. No. 5383-91

 Under the Federal Insecticide, Fungicide, and  
 Rodenticide Act as amended, for the  
 pesticide, registered under  
 EPA Reg. No. 5383-91

### DESCRIPTION

Troysan® Polyphase® 604 is a broad spectrum liquid, non-metallic fungicide effective against a wide variety of fungal organisms. It may be used as a fungicide in cutting oils, textiles, paper coatings, inks, adhesives, canvas and cordage, textile processing chemicals (lubricants, sizing and coating compounds), liquid detergents, soft soaps, household cleaning products, room deodorizers and air fresheners. It is also recommended as a wood preservative. Troysan® Polyphase® 604 may be applied in aqueous dispersions to new lumber, plywood, particle board, millwork, and other construction lumber, to prevent the growth of mildew, sapstain, and wood destroying fungi. For use on above-ground application only.

### USES:

The following are recommended use levels for Troysan® Polyphase® 604. All recommendations are in percentage by weight and refer to the product Troysan® Polyphase® 604. 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 Troysan® Polyphase® 604 in a given end use, field trials are suggested.

### PAINTS AND STAINS:

Troysan® Polyphase® 604 will generally impart protection when used at levels of 5-12% 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 12.5% by weight. For interior paints, because of the reduced fungal hazard, levels of 2.0-2.5% will usually be adequate. For wood protective stains which are in both interior and exterior applications, levels of 5-15% based on formula weight are recommended, depending on the type of protection desired. If protection against wood destroying fungi is required, then up to a level of 30% is sufficient. If protection against blue stain and mold are required, then a level of 5-15% is sufficient. Troysan® Polyphase® 604 should be added with good agitation at the end of the manufacturing cycle.

### METAL WORKING FLUIDS:

POLYPHASE® 604 may be used in metalworking fluids to prevent fungal growth at concentrations of 0.5-8.75%. It should be added to the cutting fluid concentrate in an amount 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.

### WOOD:

For use on wood in above-ground applications only. Treating solutions may be prepared by diluting Troysan® Polyphase® 604 in water emulsion. Levels of 5-30% (0.48-1.80% a.i.) Troysan® Polyphase® 604 are suggested depending on the type of protection required, severity of end use conditions and the duration of protection required. All products should be field tested in order to insure that the most cost-effective level of Troysan® Polyphase® 604 is being used.

### SAPSTAIN CONTROL:

For the prevention of blue stain and mold fungi on freshly sawn lumber, a concentration of 0.3-0.75 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® 604 is also recommended for use on millwork, including doors, window frames, exterior siding, composite board, plywood and other construction lumber when protection against the growth of mildew, blue stain and wood destroying fungi is required. Wood treated with Troysan® Polyphase® 604 does not change in appearance and may be painted when dry. For applications of this type, Troysan® Polyphase® 604 should be formulated in water based systems. These formulations may be applied by either immersion, spray or brush methods. Suggested use range of Troysan® Polyphase® 604 is 5 - 30% based on formula weight, depending on the type of protection required. For protection against wood destroying fungi, a level of up to 30% may be required. For protection against blue stain and mold fungi, a level of 5-15% is sufficient. Troysan® Polyphase® 604 is not recommended for wood surfaces which come into direct contact with food.

**TEXTILES:**

**Troysan® Polyphase® 604** may be used as a mildewcide in aqueous based coatings or dyes and processing chemicals (lubricants, sizing, etc.) which are applied to the textile material. Typical end use of these materials is in such areas as carpets, canvas and cordage, drapes, shower curtains, etc. **Troysan® Polyphase® 604** should be added at the end of the production cycle of the coating or dye. **Troysan® Polyphase® 604** will normally impart protection to the substrate when added at levels of 1.0-20% based on the total formula weight.

**PAPER COATINGS:**

**Troysan® Polyphase® 604** may be used as a mildewcide in aqueous based coatings which are applied to paper. Examples of such paper coatings are corrugated cardboard and soap wrappers. **Troysan® Polyphase® 604** should be added at the end of the manufacturing cycle of these coatings with good agitation. **Troysan® Polyphase® 604** will generally impart protection to the substrate when added at a level of 1.75-10% based on the total weight of the formulation.

**CANVAS AND CORDAGE:**

**Troysan® Polyphase® 604** may be used as a mildewcide in both aqueous and solvent based formulations which coat canvas and cordage substances. **Troysan® Polyphase® 604** should be added toward the end of the production cycle of the coating with good agitation. **Troysan® Polyphase® 604** will generally impart protection to the substrate when added at levels of 5-20% based on the formula weight.

**INKS:**

**Troysan® Polyphase® 604** may be used in aqueous based ink solutions for protection against the attack of fungal organisms. It is recommended that **Troysan® Polyphase® 604** be added at the end of the production cycle. **Troysan® Polyphase® 604** will generally impart protection when used at levels of 1.75-10% based on the formula weight.

**ADHESIVES:**

**Troysan® Polyphase® 604** 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 0.45-10% based on the formula weight. **Troysan® Polyphase® 604** should be added toward the end of the production cycle with good agitation. For non-food, non-medical use only.

**HOUSEHOLD CLEANING PRODUCTS:**

**Troysan® Polyphase® 604** may be used in aqueous-based systems used in household product formulations to prevent the growth of fungal organisms. **Troysan® Polyphase® 604** will generally impart protection when used at levels of 0.03% to 1.0% based on the total weight of the formulation to be protected. It is recommended that **Troysan® Polyphase® 604** be added at the end of the production cycle. It is for non-food use only.

**DETERGENTS AND SOFT SOAPS:**

**Troysan® Polyphase® 604** may be used in aqueous-based liquid detergent and soft soap formulations to prevent the growth of fungal organisms. **Troysan® Polyphase® 604** will generally impart protection when used at levels of 0.03% to 1.0% based on the total weight of the formulation to be protected. It is recommended that **Troysan® Polyphase® 604** be added at the end of the production cycle. It is for non-food, non-medical use only.

**ROOM DEODORIZERS AND AIR FRESHENERS:**

**Troysan® Polyphase® 604** may be used in aqueous-based room deodorizer and air freshener formulations to prevent the growth of fungal organisms. **Troysan® Polyphase® 604** will generally impart protection when used at levels of 0.03% to 1.0% based on the formula weight. It is recommended that **Troysan® Polyphase® 604** be added at the end of the production cycle.

**HANDLING & STORAGE:**

**Troysan® Polyphase® 604** has a tendency to [crystallize] [gel] at low temperatures. Storage temperatures below 90°F (32°C) and above 32°F (0°C) are recommended. Store drums in an upright position. Do not reuse empty drums. Dispose of in accordance with label directions. Complete safety and handling information will be found in the Material Safety Handling Data Sheet.

**NOTE:**

The information and data given 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.



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| <b>TYPICAL PROPERTIES:</b>   |   |
| Appearance.....              | Amber mobile liquid                         |
| Active ingredient.....       | 6.0% min. 3-iodo-2-propynyl-butyl carbamate |
| Odor.....                    | Characteristic                              |
| Soluble.....                 | In aqueous based systems                    |
| Wt./U.S. Gallon (lbs.):..... | 10.03                                       |