

PRODUCT DATA SHEET

PQ-8®

PRODUCT DESCRIPTION

Fungicide concentrate for control of sapstain and mold in freshly cut lumber and timber.

PQ-8 is a one-component system and may be used with insecticides, such as X-Lance®, for insect control.

DIRECTIONS FOR USE

PQ-8® is a water-soluble formulation of copper-8-quinolinolate (Oxine Copper) which mixes readily with water. PQ-8 is supplied as a concentrate to be diluted either manually or automatically in accordance with instructions. PQ-8 can be applied to wood products by dip, spray, or flow-coat.

For best results, a pH adjustor such as Adjust-O-Bor or Buffer-Up 14 should be added to the water at a rate of one-half gallon pH adjustor for each one gallon of PQ-8. (Add the pH adjustor **before** the addition of PQ-8). The resulting solution will require periodic agitation. Alternate buffering agents may be used, but a pH of 5 or higher should be maintained when any pH adjustor is used.

As a general guideline, for best control of mold and stain, the diluted (ready-to-use) liquid fungicide solution should be applied as soon as possible after sawing. In no case should more than 48 hours elapse between sawing and treatment of the wood. This is most important in situations where weather conditions are favorable for fungal growth.

Otherwise, fungal attack may extend below the wood surface, beyond the reach of a surface fungicide treatment.

In warm weather and/or in high-humidity situations, it is advisable to retreat lumber after four weeks, especially when dead piled.

Remove sawdust and other debris from application apparatus daily to maintain maximum solution effectiveness. Freshly treated lumber and treatment solutions should be protected from rain.

PQ-8 is registered for industrial use only.

PREPARATION OF SOLUTION

FOR DIP OR FLOWCOAT

BASE STRENGTH - for rough-sawn lumber 2 inches or less in thickness, one gallon of PQ-8 is combined with 150 gallons of water. Under mild to moderate conditions, base strength solution provides fungal control when applied to rough cut wood, provided that drying, storage and shipment are carried out in accordance with optimum industry standards. Solution consumption is typically as follows:

10 gal on 8/4 cut per 1000 board feet

15 gal on 6/4 cut per 1000 board feet

20 gal on 4/4 cut per 1000 board feet

STRONGER THAN BASE STRENGTH - Stronger solutions are needed for lumber thicker than 2 inches, for tightly bundled lumber, surfaced wood, and for prolonged exposure to wet conditions. These stronger-than-base strength solutions are typically in the range of one gallon of PQ-8 diluted with 50 to 125 gallons of water.

Smooth-surfaced lumber normally retains one-half as much fungicide solution as rough cut wood and hence needs a stronger concentration than Base Strength to deposit the necessary amount of fungicide, such as 1 to 75.

FOR SPRAY APPLICATION

A spray system generally applies less solution to the wood than dipping or flow coating. Consequently, the strength of a spray solution needs to be higher. The strength depends on the type of wood treated and on the spray system that is being used.

TESTING SOLUTION STRENGTH

Use-solution strength and pH should be tested daily. The pH should be maintained at 5.0 or above. It is important that the recommended concentration and pH be maintained in order to give proper protection against fungal attack. Contact your ISK Biocides, Inc. representative for available test methods or test kit.

PQ-8 APPLICATION TECHNIQUES

The most common method of applying anti-stain chemicals is a dip immersion. Experience has proven that an immersion of a single board for a short duration (five to ten seconds) in a properly-maintained solution at the dilution ratio of 1 gallon of PQ-8 per 150 gallons of water will control stain and mold in mild staining conditions. Dipping complete packages of lumber will normally require two to five minutes immersion. All surfaces should be treated in order to ensure control. Remove bundles when air bubbles stop coming from between the layers of boards.

PQ-8, in the absence of a pH adjustor, is acidic and corrosive to mild-steel, galvanized steel and brass. Dip vats, spray equipment, drain aprons, plumbing, handling equipment, etc. that may come into contact with PQ-8, either concentrate or diluted, should be constructed of materials which are corrosion-resistant. Mild steel equipment can be coated to reduce corrosion. The mild steel must be cleaned and sandblasted and a coating applied which is resistant to abrasion. Epoxies (bis-epoxies) are usually best suited for this purpose. Use epoxy manufacturing guide to allow proper curing.

When application equipment is already in place and coating or replacement is not feasible, corrosion can be controlled by the addition of Adjust-O-Bor or Buffer-Up 14 to the water. Observe mixing precautions concerning sequence of addition of pH adjustors.

MIXING INSTRUCTIONS

We recommend use of a pH adjustor (such as Adjust-O-Bor or Buffer-Up 14) in combination with PQ-8. When using PQ-8 and a pH adjustor, always add the pH adjustor before PQ-8 to water (never the reverse). Use gentle agitation. Avoid aeration of the solution during mixing and use. Spray systems require the addition of an anti-foaming agent.

One-half gallon of Adjust-O-Bor or Buffer-Up 14 should be added for each one gallon of PQ-8 for softwoods or hardwoods. The resulting solution will require periodic agitation. The pH should be maintained at 5.0 or above.

TREATING PALLETS FOR MOLD

For best control, pallets must be mold free when treated. If the pallets can't be built and treated quickly enough to prevent mold growth, the components should be treated. Pallet components may require a longer dip time of up to 5 minutes. For treating pallets or pallet stock, the PQ-8 dilution should range from a minimum of 1:150 for mild conditions up to 1:40 for severe applications. For spray or flood coat, even stronger dilutions may be needed (as high as 1:15 in some cases). Please consult with your ISK Biocides representative to determine proper dilution and dip time for your conditions.

HANDLING AND STORAGE

KEEP OUT OF REACH OF CHILDREN

COMBUSTIBLE! Concentrated product is combustible. Diluted use solution is not combustible.

Do not handle until all safety precautions have been read and understood. See product label and Safety Data Sheet for hazards and precautions.

Observe good personal hygiene practices. Change protective gloves/clothing when signs of contamination appear.

Keep in a tightly closed container, stored in a secure, cool, dry, ventilated area. Protect against physical damage. Mix contents before using. Do not allow to freeze.

For product emergencies, call Chemtrec toll free at 1-800-424-9300.

TECHNICAL DATA

PHYSICAL DATA		INGREDIENTS	
Flashpoint	101°F PMCC. Use solution is non-combustible.	Copper 8 Quinolinolate	5.4%
Appearance	Transparent Orange Liquid	Inert Ingredients	94.6%
Bulk Density	8.7-9.22 lbs/gal	Total	100.00%
Pour Point	Approximately 0°F (18°C)		
Viscosity	70-120 cps at 70°F (Brookfield No. 2 at 20 rpm)		
Freezing Point	Prolonged storage below 0°F (-18°C) will cause solidification. If allowed to gradually		
Specific Gravity	1.06		
Stability	Do not use in contact with concrete or mild steel unless properly protected (epoxy coating or other non-reactive coatings).		
Storage	Concentrate is stable over a wide temperature range. (Minimum two years storage at normal temperature (80°F, 27°C))		

WARRANTY AND LIMITATION OF DAMAGES

Seller warrants to those persons lawfully acquiring title to this product that at the time of the first sale of this product by seller this product conformed to its chemical description and that it was reasonably fit for the purposes stated on the product label when used both in accordance with the Directions for Use appearing on the product label and under normal conditions of use. Buyers and users of this product assume the risk of all loss or damage from use or handling of this product that results from their failure to read and comply with the Directions for Use of this product, which appear on the product label. SELLER MAKES NO OTHER EXPRESS OR IMPLIED WARRANTY, INCLUDING ANY OTHER EXPRESS OR IMPLIED WARRANTY OF FITNESS OR OF MERCHANTABILITY, AND NO AGENT OF SELLER IS AUTHORIZED TO DO SO. Unless expressly prohibited by state law, the liability of seller for any breach of warranty shall not exceed the purchase price of the product as to which a claim is made.

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