

Copper Azole FAQ Sheet Cox Industries, Inc.

What is copper azole preservative?

In the early 1990s, as questions began to be asked about CCA preservative, Arch scientists started work on alternative products. The most promising, and the one eventually brought to market, was copper azole. It has two active ingredients: copper and azole, as a co-biocide to prevent damage from copper-tolerant fungi, an organic azole.

It was introduced in Europe in 1992, and in the United States in 2001. The original formulation included borate, but that was unnecessary for typical outdoor applications in the United States and was eliminated. Now there are more than 60 North American companies treating wood with copper azole, plus others in Europe. This wood has been used in thousands of residential, commercial, agricultural, and industrial applications.

Is it safe to people and the environment?

Copper azole and copper azole-treated wood have been studied carefully by toxicologists and biologists as well as by wood preservation experts. Results of a human health risk assessment and other tests have shown it to be harmless when used as recommended.

I am familiar with ACQ-treated wood but not with wood treated with copper azole. Are they similar?

They are very similar. Both were developed as alternatives to CCA, and both are heavily dependent on copper as their primary preservative. Both contain a small amount of organic fungicide – azole in the case of copper azole and quaternary in the case of ACQ. Where there are differences, we think that slight advantage lies with copper azole. However, many U. S. retailers have used them interchangeably. They look and perform very similarly when produced correctly.

Regarding corrosion of metal hardware, the newer types of ACQ are very similar to copper azole – both are in the “excellent range” as defined in the *Corrosion Engineering Handbook*.

How do Copper Azole and ACQ differ?

As mentioned above, the similarities are greater than the differences. However, there are some differences, most of which affect producers rather than retailers or users.

Any direct comparison must take into account the type of ACQ. The developers of ACQ have tried to upgrade their formulations several times. Over the past 10 years they have offered ACQ type A, ACQ-B, ACQ-C, ACQ-D, ACQ-D carbo-quat, and ACQ-D with micronized copper. The two most common in the United States are ACQ-D carbo-quat and ACQ-D with micronized copper.

Copper azole is probably most like ACQ type D carbo-quat. Copper azole does not contain chlorides as did the earlier versions of ACQ, and the amount of copper azole needed to protect wood is less the amount of ACQ needed.

The main differences in the preservatives are in how they are produced and how they are shipped to treating companies. There is little difference in the end products, when they are properly produced.

Why should a purchaser choose copper azole-treated wood over ACQ-treated wood?

Unless the producer is still using an early type of ACQ (i.e., A, B, C, or D), the purchaser should consider more than the chemical. Copper azole and the later types of ACQ are similar and do not provide a good basis for a decision. Purchasers should consider other factors that are more important:

- the expertise and reliability of the treating company
- the quality control program assuring proper production
- the brand name on the wood
- the support available.

Has CA-B been around longer than ACQ?

Wood products treated with Copper Azole have been used effectively around the world since 1992. ACQ treated wood was first introduced in the US in 1992, but has been successfully used in Europe, Japan, New Zealand, Asia and Australia since 1987.

Why should I buy copper azole treated wood from Cox or a building supply store?

In choosing copper azole treated wood from Cox, a purchaser gets a dependable product and a helpful partner.

Cox Industries has been treating wood since 1954, and has a reputation as one of the finest, most respected producers in the United States. It has always been at the forefront of developments in wood preservation.

The quality of Cox material is checked internally by on-site laboratory analysis; double-checked by the preservative manufacturer, Arch Wood Protection (an international leader with global operations); and also monitored by an independent inspection agency accredited by the American Lumber Standard Committee. Purchasers can be certain they receive wood that has been properly treated.

The treated wood from Cox bears the (Wolmanized / DuraPine) name. They put this name on the wood because they are proud to stand behind the brand. Cox does not look upon their products as generic treated wood; their output is special wood in which they have full confidence. This brand name provides marketing opportunities for retailers. They can promote a particular brand that their customers can trust. (Wolmanized wood is the most widely used brand in the United States. / DuraPine is the most popular brand of treated wood in Cox's marketing area.)

And from Cox you get not only a product, but the expertise and assistance to help you sell it.