

Data Center critical infrastructure can now be better protected by making use of Government-funded research for guided missiles

Dataguardian™

WHAT IS IT FOR?

It improves reliability and reduces failures and data-loss in Data Centers, the infrastructure upon which depends the functioning of our modern civilization.

It is to be applied to the galvanized steel structures supporting the raised floors, the floor-panels and cable-trays above or beneath, and the racks of electronics that store all the information in Data Centers. It will captivate the zinc metal whiskers that unpredictably grow from all galvanized steel surfaces, as well as those that may be present on the galvanized steel. Existing zinc whisker infestations need not be removed, as the airborne whiskers create a hazard of electrical failures. Whiskers that are present will be flattened and contained by application of the coating, as will any new whiskers that may grow or old whiskers that continue to grow.

WHERE DID IT COME FROM?

Its design evolved from research with tin whiskers on circuit boards. These create random electrical failures. In high-reliability electronics, communications and critical Defense programs, reliability can equate to lives saved. The Dataguardian coating is made under license from Whisker-Tough Development, who developed a coating specifically designed to defeat metal whisker short-circuits on electronic assemblies in guided missiles. That ten-year development work was supported in part by over two million dollars in research funding from a U. S. Government Agency. The same science that governs the physics of tin-whisker-captivation also applies to any other kind of metal-whisker; that science was then applied to develop the Dataguardian coating for captivating zinc whiskers.

IS IT ENVIRONMENTALLY FRIENDLY?

It is an environmentally-friendly waterborne, non-hazardous product.

The operation of a Data Center relies on many thousands of large circuit-card assemblies called Servers. These process the information and cost hundreds to thousands of dollars each. Their unnecessary premature failure, replacement and interruption of electronic service wastes a large amount of energy, productivity and dollars for which the service-consuming public ultimately pays.

By reducing the unnecessary premature failure of these expensive electronic assemblies due to the zinc whiskers blown into them by the air-cooling system, manufacturing-energy-waste, operating-cost and productivity-loss are all reduced. This is the ultimate goal of things being made more Green.

HOW IS IT MADE?

It is a waterborne coating, made as ordinary latex paints are made, with the same manufacturing equipment that exists in most paint manufacturing companies.

HOW IS IT APPLIED?

It is designed to be applied by brush, roller, paint-spray equipment or a garden-sprayer as circumstances or convenience may dictate, by the painters of any maintenance-company. Only one application needed. The usage is about 250 square feet per gallon, or about 6 square metres per liter.

WHERE IS IT AVAILABLE?

Smith & Co.
5100 Channel Avenue
Richmond CA 94804-4646

Pricing upon request.

Contact information

Smith & Co.
support@smithandcompany.org
1-510-237-6842

Whisker-Tough Development
steve@whisker-tough.us
1-510-237-5986