

## **Cool-Rite Quick Kleen Technical Data**

Cool-Rite Quick Kleen is a non acid based cooling system cleaner. Its formula works on the chemical principle of *chelation*. Chelation (key-lation) is the process of solubilization of metals or salts by forming a chemical complex, or sequestering.

Chemically, Cool-Rite Quick Kleen's formula contains a multidentate spiral ligand form that surrounds metallic and salt scale ions. Cool-Rite Quick Kleen's chemistry contains an internal negative charge which allows for the greatest bonding energy.

It contains both carboxyl and tertiary amines as coordinating sites. It uses the most versatile chelant chemistry for controlling deposits over a broad pH range. And it's completely miscible with water.

Cool-Rite Quick Kleen isn't affected by extreme conditions of temperature, acidity, or basicity, and is inert to most chemicals. It effectively chelates calcium and other alkaline earth metals, as well as ferric iron, zinc, aluminum, etc.

In simpler terms, Cool-Rite Quick Kleen uses chemistry that reacts with both metals and scale deposits found in cooling systems. Its formula displaces the water surrounding the deposit, then attaches itself to the deposit. By surrounding the deposit, it keeps it from reattaching and then holds it in suspension until flushed or drained.

Chelation is a much more effective way to deal with modern cooling systems. It attacks the deposits; not the surface metals. It's safe to use on modern, multi-component (aluminum, brass, plastic, etc.) cooling systems. It doesn't require a neutralizer or flush after use.

Run-Rite