



Innovation. In our raw materials. In our solutions.



COST / PERFORMANCE

ENVIRONMENT / HEALTH & SAFETY

PERFORMANCE

Discoloration Study: (Drop Test vs Immersion Testing)

In our opinion the discoloration seen on certain metals with BJSi is due to a reaction that occurs at the solid (metal), liquid (cleaner), air interface. In order to demonstrate this effect, we utilized the following drop test method:

1. Apply one drop of formulated cleaner with HNA onto clean metal surface.
2. Observe visually for discoloration at 15 minutes, 30 minutes and 1 hour.
3. Use the same cleaner without HNA as the control. If the control does not discolor the metal, use of HNA is not required. Discoloration is normally identified as a "ring" around the droplet.

Comments:

HNA was specifically developed for use with BJSi formulations on stainless steel and brass. Other metals and coatings used on various fixtures need to be checked for discoloration and whether HNA is a viable solution should discoloration be observed.

HNA is not an acid inhibitor and is not designed to be a replacement for traditional acid inhibitor chemistries. Depending on the specific application, the incorporation of an acid inhibitor may be required. Contact for acid inhibitor recommendations.

We recommend a use level of 2% HNA in most any concentration of BJSi used. i.e. A level of 2% HNA resulted in elimination of discoloration on stainless steel and brass in various concentrations of BJSi for up to 1 hour contact time at room temperature. Use levels of less than 2% may be applicable depending on contact time parameters and metal used.

Certain types of surfactants used with BJSi may interfere with the performance of HNA. If discoloration is still visible on stainless steel and brass when using 2% HNA, check to ensure that performance is not being affected by surfactants being used in the formulation.

For applications not requiring Green Seal approval, we recommend the use of MSI over HNA.

USES & APPLICATIONS



Innovation. In our raw materials. In our solutions.

iDATASM assist

Need assistance in developing a custom solution?

Win has a full-service lab that can collaborate with you and help you meet your cost, performance and environmental objectives! **Click the HELP! icon** and let us earn the right to invest in your success!



PRODUCT SPECIFICATIONS

PACKAGE & HANDLING

REGULATORY / TOX INFORMATION
