

Bellacide[®] 355

fast acting, long lasting

Reduce oxidizer's corrosivity with Bellacide 355

Challenge

Bleach is commonly used to control microbiological growth in water reuse for fracturing and production. However, it's known that bleach's corrosive characteristics have detrimental effects on equipment and piping.

Test

In a laboratory test, bleach (sodium hypochlorite) was combined with Bellacide 355 to determine the corrosive properties of this combination. N80 steel was tested over a 72-hour time span for the following mixtures:

1. Control (no additive).
2. Bleach 250ppm active as sodium hypochlorite.
3. Bleach 250ppm active as sodium hypochlorite + 10ppm active Bellacide 355.
4. Bleach 250ppm active as sodium hypochlorite active + 25ppm active Bellacide 355.
5. Bleach 50ppm active as sodium hypochlorite active + 10ppm active Bellacide 355.

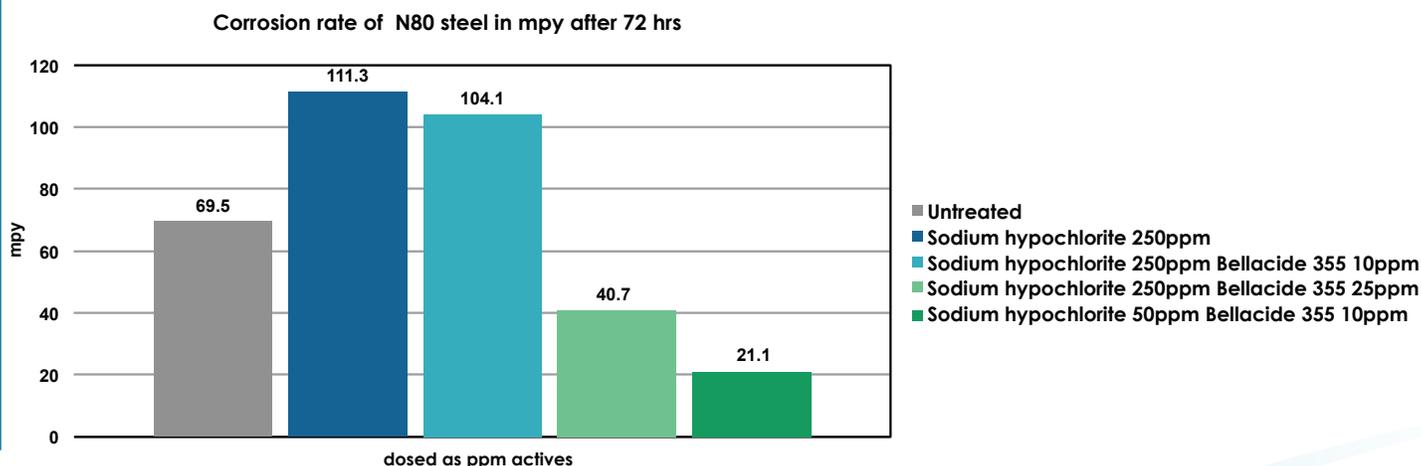
Results

In a typical field dose of 250ppm, as active sodium hypochlorite, a corrosion rate of 111.3 mpy was seen. With the addition of 10ppm active of Bellacide 355, a reduction of 6 percent in the corrosion rate was observed. The application of Bellacide 355 at 25ppm active (with the same 250ppm of sodium hypochlorite), reduced the corrosion rate by 63 percent.

Bellacide 355 has synergistic compatibility with halogens as seen in other industries, where the same biocidal efficacy can be achieved at a lower halogen dose. This test was designed to mirror this effect by reducing sodium hypochlorite to 50ppm and Bellacide 355 to 10ppm. A reduction of 81 percent was observed.

Conclusion

These lab results validate customer feedback when using Bellacide 355. Replace your non-oxidizer with Bellacide 355 and watch halogen use go down, and corrosion rates plummet.



Our wide selection of biocide chemistry can be tailored for any treatment scenario. [Learn more at www.wateradditives.com](http://www.wateradditives.com)

Bellacide® 355

Bellacide 355 is a fast acting, long lasting biocide that kills SRB's, APB's and biofilm in the widest range of conditions. Bellacide 355 will not degrade and maintains performance regardless of pH, temperature, pressure or the presence of reducing agents. Bellacide 355 is the most robust product for all biocide needs, with the added benefit of reducing corrosion rates.

Bellacide 355 Fast acting, long lasting	
Appearance	Clear, colorless liquid
Specific gravity at 20° C	0.98
pH	6.0 – 8.0
Odor	Slight to none
Boiling Point	100° C (212° F)



www.wateradditives.com

Americas

1979 Lakeside Parkway,
Suite 925
Tucker, GA 30084, USA
Phone +1 678 802 3050
Or 800 600 4523
Fax +1 678 802 3024

Asia Pacific

60, Robinson Road, #12-01
BEA Building
Singapore 068982
Phone +65 9745 3227
Fax +65 6234 3606

Europe & Africa

2 Brightgate Way
Stretford, Manchester M32 0TB
United Kingdom
Phone +44 161 864 6699
Fax +44 161 864 6666

Middle East

FZE Dubai Branch
TechnoPark Jebel Ali
Block B, Level 1, Office 107
PO Box 263164
Dubai, United Arab Emirates
Phone +971 4 880 7336
Fax +971 4 880 7404

Patents:

BWA Water Additives (BWA) owns or is the licensee of patents and patent applications, which may cover the products and/or uses described in this case study. The following are registered trademarks of BWA Bellacide, Drop and Swirl logo. © Registered US Patent and Trademark Office. © 2013 BWA, All rights reserved.

The information contained in this case study is based on data available to BWA Water Additives and is thought to be correct. Since BWA has no control over the use of this information by others, BWA does not guarantee the same results described herein will be obtained, and makes no warranty of merchantability or fitness for a particular purpose or any express or implied warranty. This information is intended for use by technically trained personnel at their discretion and risk.

BWA Water Additives UK Limited is a private limited company registered in England and Wales at 2 Brightgate Way, Manchester M32 0TB, Registered No.5657343.