

Key Performance Advantages

- Excellent alternative to butylaminoethanol
- Efficient neutralizer and pH adjuster
- Globally compliant



Metalworking Fluids

CORRGUARD[®]-95

Amino Alcohol for Metalworking Fluids The Preferred Choice versus Butylaminoethanol (BAE)

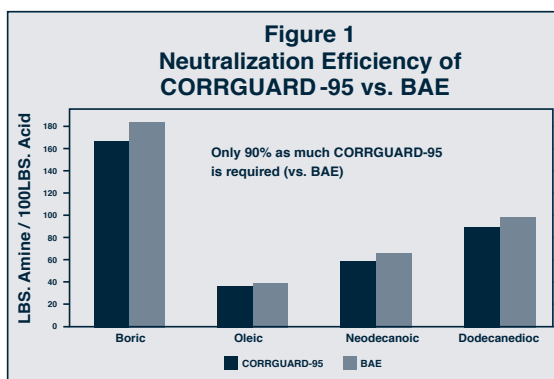
CORRGUARD[®]-95 Amino Alcohol for metalworking fluids is a great choice for formulators considering high performance alternatives to BAE-based products, including SYNERGEX¹. CORRGUARD-95 provides the following benefits:

- Lower use level
- Excellent for globally compliant formulations
- Resistance to microbial degradation

Key Benefits

A More Efficient Neutralizer/pH Adjuster at Lower Use Level

The following chart confirms the neutralization efficiency advantage of CORRGUARD-95 Amino Alcohol based on its lower equivalent weight (~95 as supplied) versus BAE (~117). Only 0.8 lbs of CORRGUARD-95 is required to replace each 1 lb of BAE.

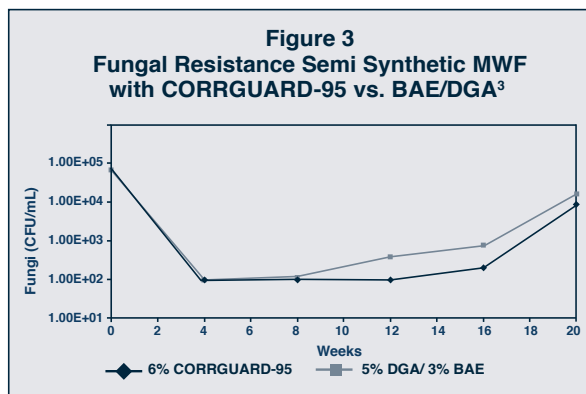
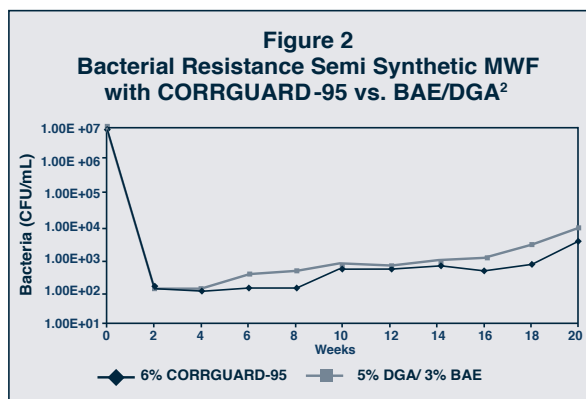


A Better Choice for Globally Compliant Formulations

More and more metalworking fluid manufacturers are trying to produce globally compliant formulations. German regulation TRGS 611 limits the amount of secondary amines, such as BAE, allowed in metalworking fluids. The primary active ingredient in CORRGUARD-95, 2-amino-2-methyl-1-propanol, is a primary amino alcohol and is a good alternative to BAE. Please note that CORRGUARD-95 contains up to 7% secondary amine, which should be considered when calculating the secondary amine content of finished fluid formulations for compliance with TRGS 611.

Greater Microbial Resistance for Longer Fluid Life, Less Maintenance and Increased Productivity

CORRGUARD-95 is widely recognized as an excellent choice for microbially resistant, long-life metalworking fluids. In a study of a semi-synthetic fluid containing 6% CORRGUARD-95 as a replacement for 8% of a combination of BAE/Diglycolamine (DGA), equivalent microbial resistance was achieved (Figure 2,3); this fluid contained 1500 ppm triazine biocide (at dilution).



Other Performance Characteristics

Fluids containing CORRGUARD-95 Amino Alcohol perform comparably to those with BAE in terms of ferrous metal corrosion control, aluminum staining and foam generation.

Formulating Guidance

ANGUS can help you formulate fluids with CORRGUARD-95 Amino Alcohol and appropriate biocides to meet your cost and performance requirements. Please contact your local ANGUS representative for technical assistance.

¹Supplied by TAMINCO under the registered tradename SYNERGEX

^{2,3}Tests performed at ANGUS Chemical Company, using ASTM E-2275-03

Product Stewardship

ANGUS encourages its customers to review their applications of ANGUS products from the standpoint of human health and environmental quality. To help ensure that ANGUS products are not used in ways for which they are not intended, ANGUS personnel will assist customers in dealing with environmental and product safety considerations. For assistance, product Safety Data Sheets, or other information, please contact your ANGUS representative at the numbers provided in this document. When considering the use of any ANGUS product in a particular application, review the latest Safety Data Sheet to ensure that the intended use is within the scope of approved uses and can be accomplished safely. Before handling any of the products, obtain available product safety information including the Safety Data Sheet(s) and take the necessary steps to ensure safety of use.

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