

## Key Performance Advantages

- Performs identically to CORRGUARD<sup>®</sup>-75 Amino Alcohol and CORRGUARD<sup>®</sup>-95 Amino Alcohol
- Improves resistance to microbial degradation
- Enhances the performance of triazine biocides



**Metalworking Fluids**

# CORRGUARD<sup>®</sup> LSA 6000 AMINO ALCOHOL

## High Performance Amino Alcohol; Compliant with German TRGS 611 for Use in Metalworking Fluids

CORRGUARD<sup>®</sup> LSA 6000 Amino Alcohol contains less than 0.75% secondary amines (by specification) and provides customers concerned with secondary amine levels an option when formulating end-use products, helping them to meet the requirements set forth in TRGS 611. Regulation TRGS 611 is published by the federal Ministry for Labor and Social Order in the Labor Registry (Germany) and concerns the commercial use of water-miscible or water-mixed metalworking fluid concentrates as used for working with or processing metal pieces.

CORRGUARD LSA 6000 is made from an enhanced production process based on the needs set forth by ANGUS customers in minimizing secondary amine levels. Production of CORRGUARD LSA 6000 Amino Alcohol is closely monitored at the ANGUS production facility in Ibbenbüren, Germany. CORRGUARD LSA 6000 performs identically to CORRGUARD-75 Amino Alcohol and CORRGUARD-95 Amino Alcohol and therefore offers the following key benefits to metalworking fluid formulators:

- Cost efficient alkaline pH development and neutralization of acidic components
- Improved resistance to microbial degradation
- Stable emulsions at high pH
- Enhanced performance of triazine biocides
- Minimal ammonia release
- Minimal leaching of cobalt
- Low secondary amine content (less than 0.75%)

Standard packages are 190 kg steel drums and 950 kg intermediate bulk containers.

## Typical Properties

The following are typical properties of CORRGUARD LSA 6000. They are not to be considered product specifications.

Appearance	Colorless liquid
Consistent and characteristic odor	
Water content, %	5.0
Purity, anhydrous, % wt (minimum)	99.0
APHA color, (heat)	60
Secondary amines, anhydrous, % weight	< 0.75
Base strength (pKa@25°C)	9.8
Molecular weight (of 2-amino-2-methyl-1-propanol)	89.1
pH (1% aqueous solution)	11.3
Vapor pressure @ 20° C mm Hg/Pascal (anhydrous)	0.34 / 45
Specific gravity @ 25°C	0.942
Viscosity @ 25°C (77°F)	135 cp
Freezing point	13-15°C (55-59°F)
Boiling point (760 mmHG)	100-165°C (212-329°F)
Flash point – Closed Cup	81.1°C/178°F

## 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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