

CORRGUARD™ 75

75% 2-AMINO-2-METHYL-1-PROPANOL SOLUTION

CORRGUARD™ 75 is the product name under which ANGUS markets 2-amino-2-methyl-1-propanol that contains 25% added water. This colorless, mobile liquid with a relatively low viscosity remains liquid at temperatures as low as -48°C to permit easy, convenient handling.

Typical properties^(a)

Neutral equivalent.....	116–121
Water (Karl Fischer), max.....	25.8% by wt.
Colour (max.).....	100 APHA
Molecular weight (calc.).....	89.1
Specific gravity at 25/25°C.....	0.968
Viscosity at 27°C.....	80 mPa·s
Freezing point.....	$<-48^{\circ}\text{C}$
pH of 0.1 M aqueous solution at 20°C	10.3
pKa at 25°C (primary active ingredient).....	9.72

(a) Values shown are typical properties and are not to be considered product specifications. Test methods available upon request.

Product Benefits

- Efficient amine for neutralization
- High base strength
- Relatively low molecular weight
- Corrosion inhibitor for steam-condensate lines
- Key component of metalworking fluids with extended fluid longevity
- Acts as a co-dispersant for particulate systems
- Multiple food contact approvals
- Acts as a reversible formaldehyde scavenger
- Component of powerful anionic emulsifier systems

Uses

Boiler water systems

The high base strength, complete water-solubility, and thermal stability of CORRGUARD 75 make it especially suitable for applications such as boiler water treatment. CORRGUARD 75 is an extremely efficient amine for removal of CO_2 from condensate-return lines of boiler water systems, thereby preventing corrosion from carbonic acid which results from the dissolving of CO_2 in condensate water. CORRGUARD 75 has a favorable

vapor/liquid distribution ratio very similar to that of morpholine for this application, and efficiently forms a water-soluble amine carbonate, which is readily dissociated in the deaerator.

Metalworking fluids

In metalworking fluids, CORRGUARD 75 is a highly efficient, multi-functional primary aminoalcohol, used to neutralize many functional acidic components like fatty acids, mono- and di-carboxylic acids and phosphate esters. CORRGUARD 75 also efficiently develops and maintains alkaline pH while providing corrosion inhibition in the form of acid salts produced in situ.

The use of CORRGUARD 75 in combination with registered biocides will often improve the longevity of these fluids. CORRGUARD 75 is also one of the least aggressive amines toward the cobalt binder in carbide tooling, and does not contribute to ammonia release which can be a problem with MEA, DEA and TEA.

Aqueous solutions

CORRGUARD 75 is also able, under certain conditions, to scavenge formaldehyde from aqueous and non-aqueous systems. Please note this is a reversible reaction, which is significantly influenced by water concentration and pH. Higher water content and lower pH favor the starting materials.

Packaging and Storage

CORRGUARD 75 is not classified as hazardous under the European Agreement concerning the International Carriage of Dangerous Goods by Road (ADR). CORRGUARD 75 does not meet any of the defined criteria for “dangerous goods” contained in the International Transportation Regulations for Air (ICAO Technical Instructions) or for Ocean Transport (IMDG Code).

Shipping containers ^(b)	Net wt.	Gross wt.
Unlined steel drums	195 kg	213 kg
Intermediate bulk containers	950 kg	1003 kg

Undiluted CORRGUARD 75 is corrosive to copper, brass, and aluminum. Contact with these metals should be avoided. Ordinary iron and steel generally are unaffected by this product and are the recommended materials of construction. CORRGUARD 75 has a low vapor pressure at ordinary temperatures. Its flash point (Pensky Martens) is >100°C. These properties cause no problems with respect to storage and handling. Do not store near heat or flame. CORRGUARD 75 should not be exposed unnecessarily to the atmosphere, since it can pick up moisture and carbon dioxide due to its amine functionality. Evidence of this may be detected by a lower alkalinity equivalency than when first received, or the formation of cloudy solutions when dissolved in alcohol.

^(b)The shipping containers listed meet UN 1A1 packaging specifications. CORRGUARD 75 is also shipped in bulk in tank cars or tank trucks.

Chemical Inventories

CAS No. 124-68-5
EINECS No. 204-709-8

Product Safety

When considering the use of any ANGUS product in a particular application, review the latest Safety Data Sheet (SDS) 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.

Contact Information	North America +1 (847) 808-3887	Western Europe +33 670654658	Middle East and Africa +33 670654658	Greater China +65 8686 5712	Southeast Asia and New Zealand +65 8686 5712
	Latin America +55 (11) 94245-5307	Central and Eastern Europe +33 670654658	Indian Subcontinent +33 670654658	Japan and Korea +65 8686 5712	
angus.com	<small>®™ Trademark of ANGUS Chemical Company Notice: No freedom from infringement of any patent owned by ANGUS or others is to be inferred. Because use conditions and applicable laws may differ from one location to another and may change with time, Customer is responsible for determining whether products and the information in this document are appropriate for Customer's use and for ensuring that Customer's workplace and disposal practices are in compliance with applicable laws and other government enactments. The product shown in this literature may not be available for sale and/or available in all geographies where ANGUS is represented. The claims made may not have been approved for use in all countries. ANGUS assumes no obligation or liability for the information in the document. References to "ANGUS" or the "Company" mean the ANGUS Chemical Company legal entity selling the products to Customer unless expressly noted. NO WARRANTIES ARE GIVEN: ALL IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE ARE EXPRESSLY EXCLUDED. Document last updated on: February 24, 2017.</small>				
					