## Dissolvine® GL-47-S Green Chelating Agent Provides Unusual Performances

Dissolvine® GL witnesses our continuous efforts to develop new and improved products. GLDA is made from the natural biobased amino acid monosodium glutamate (MSG), which is readily biodegradable and has high solubility over a wide pH range. It is non-sensitizing to human skin, and can enhance the bactericidal ability and biodegradability of the product. Compared with phosphate, GLDA is a more effective chelating agent and will not cause eutrophication of water bodies

Dissolvine® GL is a kind of tetrasodium glutamate diacetate salt (GLDA-Na $_4$ ). GLDA has four carboxylic acid groups, which can bind the nitrogen atom in the center of the molecular structure to divalent and trivalent metal ions through strong multiple bonds.

Dissolvine<sup>®</sup> GL is a typical sustainable innovative material, which enhances the value of your products both economically and ecologically, and is therefore considered a more

cost-effective, safer and greener chelating product.

Dissolvine® GL is based on sodium L-glutamic acid (MSG), a food-grade natural amino acid salt. This biomass feedstock is used to produce GLDA products containing more than half of the bio-based carbon atoms. We believe that this natural amino acid structure in the GLDA molecule makes it easy to be recognized as food for bacteria, thereby making GLDA more readily biodegradable. Dissolvine® GL has low toxicity and low ecotoxicity, and may not be labeled hazardous. More importantly, Dissolvine® GL-47-S meets EPA requirements as a safer chemical ingredient. Consumer and industrial products using Dissolvine GL-47-S will be labeled "Safe Choice" on the package. Dissolvine® GL has strong chelating properties for hard water metal ions such as Ca<sup>2+</sup> Mg<sup>2+</sup> ions, etc., which is more effective to water softening, improving cleaning effect and formulation stability.

## Application field

## Household cleaning

- Automatic dishwashing
- Laundry detergent
- Hand Dishwash
- Surface cleaning

## Industrial and institutional cleaning

- Automatic Dish Wash
- · Cleaning in place
- Transport cleaning
- Hard surface cleaning
- Laundry detergent
- Disinfectant and bactericide
- Metal cleaning





