

GLUCONO DELTA LACTONE

Fish and Fish Products

GDL is used successfully in the production of fish cake, surimi and fish sausage. This is a very important part of the seafood industry in Asia. GDL functions primarily by lowering the pH which enhances the action of preservatives such as sorbic acid, counters the protein degradation which occurs at higher pHs and aids in maintaining the desired color of the fish product.

Typical formulations contain between 0.1 % - 0.5% GDL added just prior to filling the casing or forming the cake. The exact amount of GDL to use is dependent on the fish species, processing conditions as well as the other ingredients used in the formulation. The shelf-life of trout fillets has been successfully extended using a 1 % GDL - 1 % lactic acid dip in combination with modified-atmosphere packaging.

The antimicrobial effect of benzoates, propionates and sorbates can be enhanced by lowering the pH of the food. GDL can be used to make this pH adjustment without causing an acidic flavor.

