

# GLUCONO DELTA LACTONE

## Cheese and Tofu

GDL is mixed with dairy milk or soy milk and other ingredients. As the temperature of the aqueous mix increases, GDL begins to hydrolyze to gluconic acid and the pH drops. When the pH is lowered sufficiently, there is a curdling or gellation of the protein complex. This protein curd forms the matrix of the cheese or tofu.

The use of GDL to prepare cheese is often preferred over natural fermentation with cultures because the process is easier to control and the end product is more uniform.

The level of GDL to use when making cheese is usually a function of the total milk solids. The amount of GDL to be added is approximately 12% by weight of milk solids. If a bacterial culture is used to supplement the process, less GDL would be incorporated.

In the preparation of tofu, GDL is added at a level of 0.3 to 0.4 % of the weight of the soymilk. GDL is especially valuable in assuring uniformity of texture in prepackaged tofu.

