

Transglutaminase Technical Data Sheet

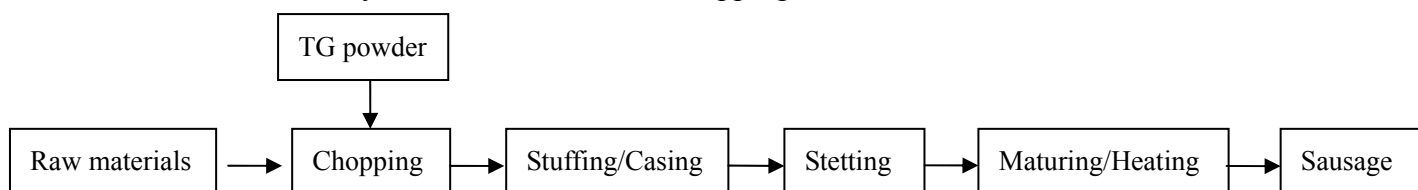
TG-PB Series

Punature TG-PB series are functional formula based on the Transglutaminase (TG enzyme) that is produced by fermentation of *Streptovorticillium Mobaraense*. Punature TG-PB series are specially designed for emulsified meat processing products. It will help to improve the elasticity, texture and juiciness of the final products.

Emulsified Products (Sausage, ham, hotdog, salami, etc.)

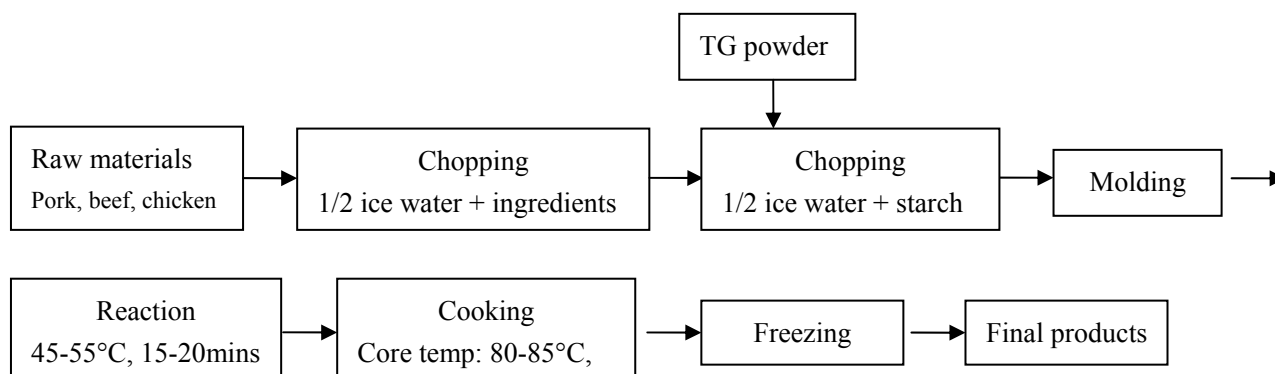
Advantages:

1. Increase gel strength.
2. Facilitate water retention and juiciness
3. Improve elasticity and texture of products.
4. Increase slice-ability and decrease waste in chopping



Meatball Products

1. Improve elasticity and texture of products.
2. Increase the product yield by 5-10%
3. It won't loss the activity in normal food processing.
4. Increase gel strength



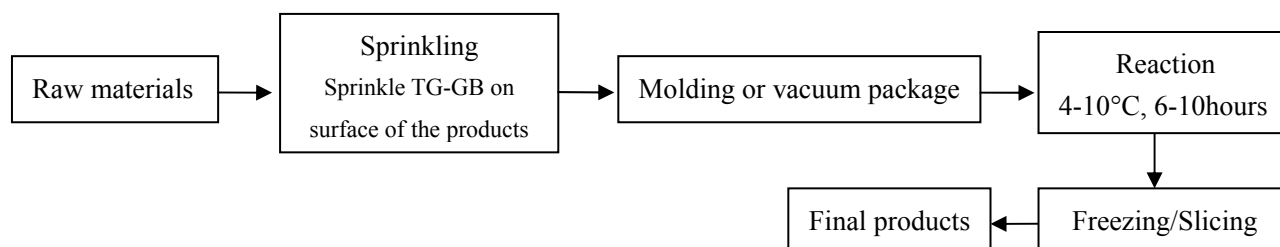
TG-GB Series

Punature TG-GB series are functional formula based on the Transglutaminase (TG enzyme) that is produced by fermentation of *Streptovercillium Mobaraense*. Punature TG-GB series are specially designed for restructured meat products. It can be added as pre-hydrated slurry or dry powder.

Restructured Products (Beef, Pork, Poultry, Fish, etc.) *Powder based*

Advantages:

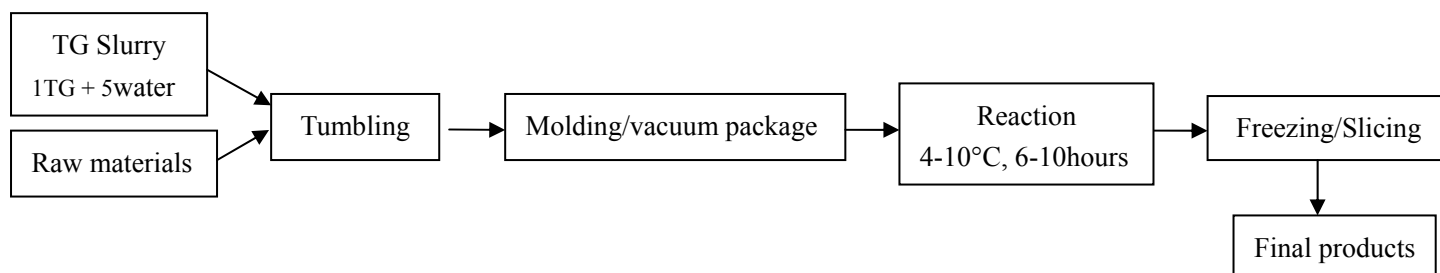
1. Increase slicing effectiveness.
2. End product with freewheeling shapes.
3. Once restructured, the product can be cooked or frozen without losing shape.
4. Create strong bonds between proteins.



Restructured Products (Beef, Pork, Poultry, Fish, etc.) *Slurry based*

Advantages:

1. Increase slicing effectiveness.
2. End product with freewheeling shapes.
3. Once restructured, the product can be cooked or frozen without losing shape.
4. Standardization of meat products even when using lower quality grades of meat.



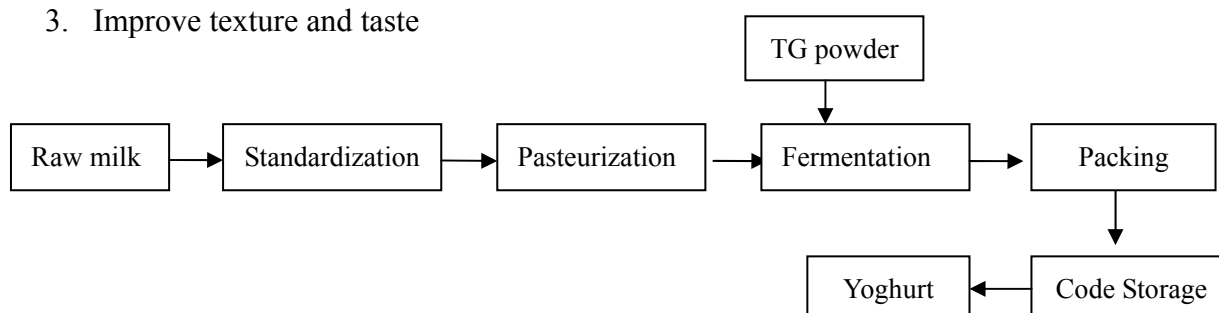
TG-D Series

Punature TG-D series are functional formula based on the Transglutaminase (TG enzyme) that is produced by fermentation of *Streptovorticillium Mobaraense*. Punature TG-D series are specially designed for dairy products like cheese and yoghurt. It will help to improve the texture, quality and yield in the dairy application.

Yoghurt Products

Advantages:

1. Increase gel strength and viscosity, optimize thickening.
2. Reduce syneresis with a smoother surface.
3. Improve texture and taste



Cheese Products

Advantages:

1. Capture more proteins from whey to increase the yield of cheese products.
2. Increase and improve cheese texture.
3. Increase slice-ability.
4. Reduce syneresis.

