## Shelf life improvers list Nov. 20, Updated

Product name	Apprications	Main components	Recommended usage	рН	Characteristics	Country of origin
Mikaku Fine Z	Various prepared products (Processed meat, Gratin, Mashed potato, Omlet, etc.)	Sodium acetate	0.5∼2.0% in rawmaterials	5. 6	Exellent anti-bacterial effect for lactic acid bacteria and heat resistant bacterial spores. Acidic taste and smell of sodium acetate are reduced significantly by Nippon Shinyaku original formulation technology "Mikaku Fine technology".	Japan
Mikaku Fine BK	Various bakery products (Bread, Pound cake, etc.)	Sodium acetate	0.5∼2.0% in rawmaterials	<ol> <li>4 (before heating)</li> </ol>	Mikaku Fine BK shows exellent anti bacterial activity for molds, spore-forming bacteria, yeast of bakery products. Due to containing oil-coated fumaric acid, Mikaku Fine BK does not inhibit fermentation of backery products. Acidic taste and smell of sodium acetate are reduced significantly by Nippon Shinyaku original formulation technology "Mikaku Fine technology".	Japan
Chef−Rich 52H	Various prepared products	Sodium acetate	0.5∼2.0% in rawmaterials	5. 6	As main component "sodium acetate" and various organic acid suppress decay of baceteria of process foods.	Japan
Chef–Lead KA	Custard cream, egg products	Glycine Sodium acetate Lysozyme	0.5∼1.0% in rawmaterials	6. 6	By synergy effect of glycine, sodium acetate and lysozyme, Chef- Lead KA suppresses heat-resistance bacteria strongly which is cause of decay of egg products.	Japan
KC-20	Boiled vegetables (Broccoli, asparagus etc.) Sea foods (Shrimp, Squid, Clams, etc.)	Sodium acetate Glycine	3.0∼6.0% in blanching and soak solution	6. 9	KC-20 improves shelf life by inhibitiong microbial growth, without affecting taste, color (Boiled vegetables) and texture (Sea foods). KC-20 shows anti-microbial effect under high pH condition.	Japan