

## Emulsification and Stabilization in Vegan Gochujang Mayonnaise with TYLOPUR® NE-4000

**TYLOPUR® NE-4000** provides excellent emulsification and stabilization to emulsified sauces like vegan mayonnaise. Omit the egg yolk using **TYLOPUR® NE-4000** and use less oil in your product to achieve the same creamy mouthfeel.

### Benefits

<b>Vegan</b>	<b>TYLOPUR® NE-4000</b> allows you to remove animal-based products like egg yolks from your emulsion sauces
<b>Great Mouthfeel</b>	<b>TYLOPUR® NE-4000</b> gives emulsion sauces the same great mouthfeel with no animal products and less oil
<b>Great Stabilization</b>	<b>TYLOPUR® NE-4000</b> stabilizes emulsion sauces and provides excellent freeze/thaw stability

### Case Study

The performance of **TYLOPUR® NE-4000**, which is a hydroxypropyl methylcellulose (E464), is shown in vegan gochujang mayonnaise.

Ingredients	[%]
Water	29.5
Vegetable Oil	23.6
Gochujang	21
Rice Vinegar	10
Sugar	10
Sesame Oil	2
Garlic Powder	1.6
<b>TYLOPUR® NE-4000</b>	1.1
Salt	1
Xanthan Gum	.2
Total	100

Table 1: Gochujang Mayonnaise Recipe

1. Combine vegetable oil, vinegar, sugar, sesame oil, garlic powder, **TYLOPUR® NE-4000**, salt, and xanthan gum in the bowl of a high shear mixer.
2. Mix all of the ingredients together until all are incorporated.
3. While streaming in the water slowly, mix in the high shear mixer for 1-2 minutes or until the blend emulsifies and resembles mayonnaise.

4. Add in the gochujang and blend further until fully incorporated.
5. Serve with steamed plant-based wontons and enjoy!



Figure 1: Gochujang mayonnaise made with **TYLOPUR® NE-4000** served alongside steamed plant-based wontons made with **TYLOPUR® MCE-100TS**

Note: All of the data presented here are accurate and reliable to the best of our knowledge, but they are intended only to provide recommendations or suggestions without guarantee or warranty. All of our products are sold based on the understanding that buyers themselves will test our products to determine their suitability for particular applications. Buyers should also ensure that use of any product according to these data, recommendations or suggestions does not infringe any patent, as Shin-Etsu will not accept liability for such infringement.