



Clean-label Phosphate Replacement for Seafood

With GPI MRA 3.5

Guide

Chemical additives like phosphates have shown to increase the risk of diseases like organ calcification and chronic kidney disease.* This consumer awareness helped fuel the growth of the clean-label market, with 78% of global consumers willing to pay extra for natural and preservative-free options in 2023.** To assist processors, GPI has developed a label-friendly solution to phosphate for seafood.

GPI is here to create your solution and guide you forward.

Perform

GPI MRA 3.5 is a dry powder, clean-label, phosphate alternative for seafood processors. It retains moisture and prolongs freshness in shrimp and other high-value seafood items.

Key Benefits:

- **Clean-label and phosphate-free**
- **Replaces Sodium triphosphate for moisture retention.** See chart data to the right
- **Contains antioxidant properties, preventing off-smells and prolonging freshness**
- **Maintains the juiciness and bite of cooked seafood**

GPI understands your product's journey from formulation to processing.

Inspire

Use GPI MRA 3.5 to extend yield and freshness in raw or cooked shrimp, lobster, scallops, and other premium seafood items.

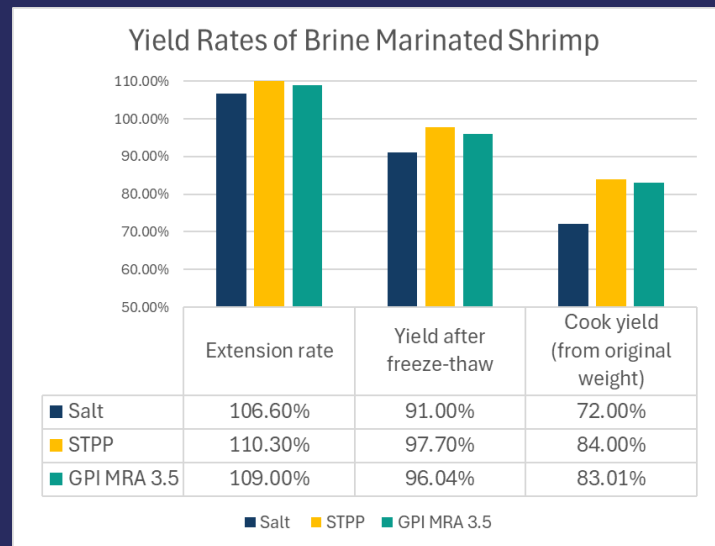
GPI is your solutions partner, helping you meet the demands of your consumers.

*Food Navigator, 78% of consumers will pay more for clean label, natural claims despite inflation, February 2023

**Ritz et. al., Phosphate Additives in Food—a Health Risk, National Library of Medicine, Jan 2027



Shrimp was marinated in brine treated with salt, sodium triphosphate or GPI MRA 3.5



Results show that GPI MRA 3.5 performs comparably to sodium triphosphate for yield enhancement in shrimp.

Looking for inspiration?
Contact: GPI@gpiglobal.com



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INGREDIENTS

Phosphate-free Marinated Shrimp

Marinated Shrimp	Extension Rate	% in Finished Product
Peeled and deveined raw shrimp	100%	90.91%
Brine uptake	10%	9.09%
Total Yield	110%	100%

Brine Composition	Brine %	% in Finished Product
Water	71.50%	6.50%
Ice	25.00%	2.27%
GPI MRA 3.5	3.50%	0.32%
Total	100%	9.09%

PROCEDURE

For best results, prepare a ratio of 1:3 shrimp to marinade. (i.e. for 1kg of shrimp, prepare 3kg of brine)

Brine Preparation

- Weigh water and ice separately.
- Disperse **GPI MRA 3.5** into water slowly while mixing. For best dispersion, water must be at room temperature.
- Let powder dissolve for 5 minutes.
- Add ice and continue mixing to bring brine temperature down to 4°C.

Marination

- Fully submerge shrimp into the brine for 2 hours with slow and constant agitation.
- Remove shrimp from brine and proceed with storage or cooking process.
- GPI MRA 3.5 is also compatible with tumbling processing or static soaking.

NUTRITIONAL FACTS

Serving size 8 large shrimp (110g)

Amount per serving
Calories 85

% Daily Value*

Total Fat 0.5g 1%
Saturated Fat 0.1g 0%
Trans Fat 0g

Cholesterol 161mg 54%

Sodium 119mg 5%

Total Carbohydrate 0mg 0%

Dietary Fiber 0g 0%

Total Sugars 0g 0%
Includes 0g Added Sugars

Protein 20g

Vitamin D 0mcg 0%

Calcium 65mg 5%

Iron 0.5mg 3%

Potassium 264mg 6%

*The % Daily Value (DV) tells you how much a nutrient in a serving of food contributes to a daily diet. 2,000 calories a day is used for general nutrition advice.

ALLERGEN INFORMATION

CONTAINS: Shrimp

GPI Global Inc. is a BRCS, HACCP and GMP certified company.



Food Safety

CERTIFICATED

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