

MIYOSHI

Microencapsulated Oil Powder

Features & Functions



Tiny Powders. Big Impact.



Functional Powder

– Versatile, Efficient, Essential.

MIYOSHI Microencapsulated Oil Powders are oil-in-powder ingredients offering superior functionality across applications.

Engineered for ease of use, textural improvement and freeze & chill stability.

Product	Oil Type	Allergy Contains	Characteristics
Magic Fat 200 (MB)	Palm	Milk Soy	All-purpose type
Magic Fat 215 (MB)	Palm		All-purpose type No animal ingredients
Magical Foam M (MB)	Coconut, Palm kernel, Palm	Milk	Whipping function, mixing with cold water or milk

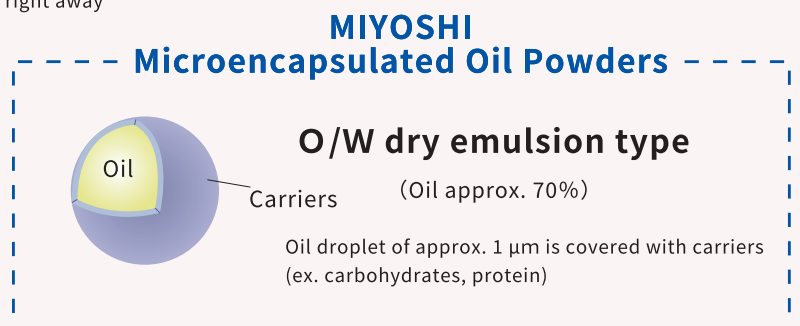
MIYOSHI Microencapsulated Oil Powders are O/W dry emulsions.

Compared to standard full-fat types (100% fat), they provide:

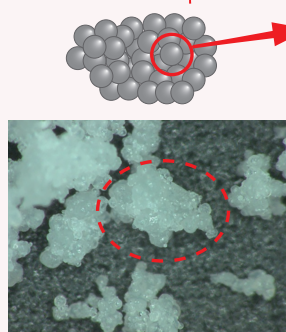
- **Excellent dispersibility** in water and dough
- **Ultra-fine oil droplets** that work more effectively in food systems
- **Noticeable functionality**—you'll feel the difference right away



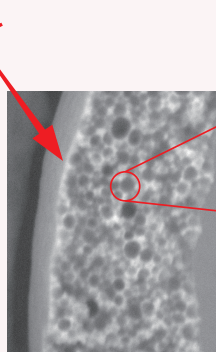
Full fat type
(100% High-melting point fat)



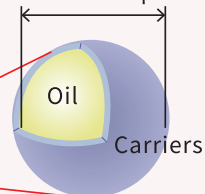
A single grain of powder
200~300 μm



Small particle 30 μm



Less than 1 μm



Micro oil droplet

How It Works

- The Science Behind the Powder

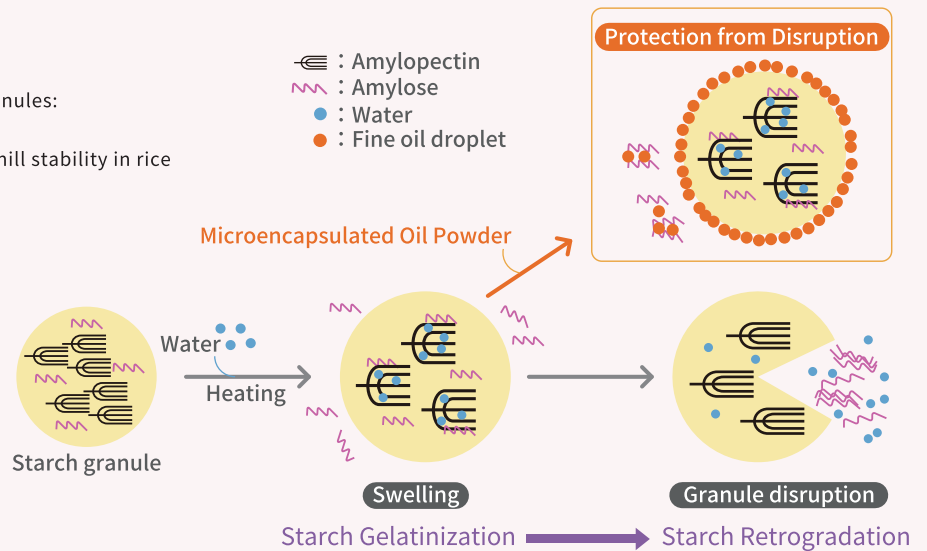
Micronized Oil Droplets

Each 1 μm oil droplet is encapsulated in starch- or protein-based carriers, allowing excellent dispersibility in powder/water/dough.



Freeze & Chill Stability

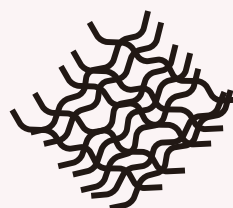
- Fine oil droplets align around starch granules:
 - Suppresses water release
 - Improves freeze stability in dough and chill stability in rice
- During cooking, oil coats rice grains:
 - Reduces stickiness
 - Improves grain separation



Interaction with Gluten and Starch

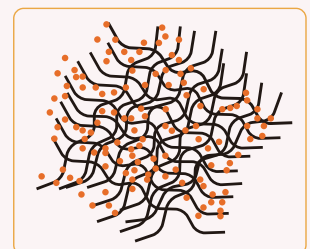
- Fine oil droplets prevent gluten aggregation → softer texture
- Helps suppress starch retrogradation

Without addition
Structure: Coarse gluten network



● : Fine oil droplet
~ : Gluten

With Microencapsulated Oil Powder
Structure: Fine and dense gluten network



Fine oil droplets prevent gluten aggregation

Application Ideas

-Bring Value to Every Bite

Magic Fat 200 (MB) / 215 (MB)



Donut & Premix

- Improves texture
- Retains softness
- Enhances moisture retention



Dumplings/Wrappers

- Maintains softness after freezing
- Prevents cracking & dryness
- Improves piece separation after cooking



Noodles

- Improves noodle separation & slimy mouthfeel
- Reduces stickiness during noodle processing



Soups & Sauces

- Adds richness & body
- Improves opacity / whiteness



Cooked Rice

- Suppresses starch retrogradation
- Improves chill & freeze-thaw stability
- Enhances grain separation



Batter & Coating

- Creates crispy texture
- Reduces coating separation after frying

Magical Foam M (MB)

- Stabilizes aeration in marshmallows
- Enables instant whipping with cold water
- Suitable for dessert mixes & beverages



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<https://bit.ly/myseml>



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