

FINE ORGANICS

Legacy with Sustainability !



Transforming Everyday foods into Better choices



Viscosity reducer
Yield value enhancer
Lecithin replacer



Higher overrun
Freeze-thaw stability
Easy piping



Fat reduction
Improved Texture & Bite
Reduced breakage



Solutions beyond...
Ingredients



Volume enhancer
Fine crumb texture
Moisture retention



Oil Binder
Crystal promoter



Antistaling
Dough strengthener
Higher oven spring
Crumb softener



Enabling Healthier Foods Across Categories



FINE delivers customized ingredient solutions across bakery, chocolate, dairy, confectionery, spreads, and snack applications.

- ✓ Fat reduction & calorie optimization
- ✓ Texture and mouthfeel enhancement
- ✓ Shelf-life extension & freshness retention
- ✓ Improved process efficiency & yield
- ✓ Lecithin replacement solutions
- ✓ Better nutrition without compromising taste

Combining functionality with Nutritional benefits we help customers develop products that support modern health and wellness trends while maintaining superior sensory appeal.



Innovations in Processed Foods: Pathways to Health and Wellness



Fat Reduction in Cookies using Fine Ingredients



Cookies at 10% - 15% Fat Reduction

Assessment Parameter	Control (Lecithin)	Finamul 4087L (10% Fat Reduction)
Cream Density	0.65	0.544
Avg. Weight of 10 biscuits (g)	123	118
Avg. height of 10 biscuits (mm)	99	110
Spread Ratio	0.60	0.54
Bite	Crunchy	Soft & Crunchy



Finamul 4087L | Emulsifier System for Cookies & Biscuits



A functional emulsifier system engineered to simultaneously improve:

Dough machinability
Fat distribution
Cookie structure
Spread control
Surface finish
Fat reduction potential

Result:

- ✓ Stronger dough
- ✓ Better fat utilization
- ✓ Improved processing robustness
- ✓ More consistent cookie quality

Recommended dosage: 0.15–0.30% on flour weight basis



Mechanism - Finamul 4087L working in Cookie Dough

Multi-Ingredient Functional Synergy



Fat / Shortening

Strongest interaction

Finamul 4087L:

- Improves fat distribution
- Supports 7–10% fat reduction (Can optimize up to 15 %)
- Maintains texture and mouthfeel
- Improves baking consistency

Flour

It strengthens dough integrity and improve tolerance to flour variability.

Benefits:

- ✓ Controlled spread
- ✓ Reduced crumbliness
- ✓ Improved stack height

Sugar

Improves creaming efficiency and air incorporation.

Benefits:

- Better dough aeration
- Improved cookie lift
- More uniform internal structure

Water

Enhanced water distribution within the dough system.

Benefits:

- Reduced dry spots
- Better dough development
- Smoother processing

Leavening System

Works synergistically with:

- Sodium bicarbonate
- Ammonium bicarbonate
- Baking powder

Result:

- ✓ Controlled spread
- ✓ Better shape retention
- ✓ Improved surface finish

Demonstrated Performance in Cookies



Operational Benefits

- Highest stack height among tested emulsifier systems
- Improved baking finish
- Reduced stickiness
- Better release properties
- Reduced crack and blister formation
- Improved machinability

Fat Reduction Trial

10% fat reduction achieved while maintaining:

- ✓ Stack height
- ✓ Surface finish
- ✓ Bite characteristics
- ✓ Spread control

Customer Value Proposition

Finamul 4087L delivers:

- Higher stack height
- Controlled spread
- Less crumbly texture
- Improved machinability
- Better surface texture
- Reduced breakage losses
- Potential 7–10% fat reduction (Optimized up to 15 %)



Value Proposition for Customers



Functional Benefits

- Supports Fat Reduction
- Improves dough machinability
- Controls spread ratio
- Enhances stack height
- Improves release properties
- Reduces stickiness

Quality Benefits

- Uniform texture
- Soft-crisp bite
- Better finish
- Reduced cracking
- Lower blister bursting
- Improved consistency

Commercial Benefits

Cost Optimization

- Up to 10% fat reduction potential (15%)

Improved Manufacturing Efficiency

- Better machinability
- Cleaner release
- Lower breakage losses

Robust Performance

- Better tolerance to flour and process variations



Take Away



Product Name: Finamul 4087L

Typical applications: Biscuits, Cookies, Crakers, Wafers, Yeast Bakery Products & Etc.

Dosages Levels: 0.15 to 0.3% on Flour Basis

Mode of Actions: Improve dough properties

Fat reduction is possible

Helps to control the spreads

Reduce stickiness & impart clean release, Improves mechinability

Even distribution of fat in dough leading to uniform baking & elimination of raw taste of the flour.

Helps in preventing 'Cracks' or 'Blister Bursting' thereby reducing breakage losses.

Remarks: Easy & safe to handle.

Does not affect the sensory attributes of products.

Normally added with other dry ingredients.



Thank you...

