

Ingredients

Dairy & Dairy Alternative Applications





| CATEGORY | SPECIFIC PRODUCTS | Alt. Cheese | Alt. Milk | Cheese | Chocolate Milk | Confections | Cottage Cheese | Cream Cheese | Desserts/Flans | Dressings | Frozen Yoghurt | Gelato | Ice Cream | Instant Dairy Protein Beverages | Kefir | Plant Protein Beverages | RTD Dairy Beverages | Sauces | Sorbet | Sour Cream | Yoghurt |
|-------------------------|--|-------------|-----------|--------|----------------|-------------|----------------|--------------|----------------|-----------|----------------|--------|-----------|---------------------------------|-------|-------------------------|---------------------|--------|--------|------------|---------|
| CITRATES, | | | | | | | | | | | x | x | x | x | x | | | | | | |
| LACTATES & | | ^ | | ^ | ^ | | ^ | ^ | | | ^ | | ^ | ^ | | ^ | ^ | 1000 | ^ | ^ | ^ |
| DISTILLED SPIRITS | | | X | | | | 0.0 | | X | | | | | | 0. 3 | | | X | | | |
| EMULSIFIERS | Lactase, | | | 8 8 | X | X | 90 | | X | X | | 8 8 | X | | 9 | X | | X | | 8 8 | |
| ENZYMES | Fermented Chymosin, Phospholipase, Proteases, Transglutaminase, Invertase, Alpha- amylase, Glucoamylase, Custom Products | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x |
| HYDROCOLLOIDS & GUMS | Acacia Gum, Agar, Carrageenan, Gellan Gum. Guar Gum, HPMC, Konjac Gum, Locust Bean Gum, MC, Sodium Alginate, | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x |
| NATURAL | 600 | X | | | | X | 7 | | X | X | X | X | X | | 7 | X | X | X | X | | |
| PHOSPHATES | | X | X | X | | ě. | X | | | X | | 8 8 | | | 0.0 | | X | | | 8 8 | X |
| PLANT PROTEINS | | X | X | | | | | | | | | | | | | X | | X | | | X |
| SALT | | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| SWEETENERS | Sugar, Fructose, Dextrose, Maltodextrin | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x |
| VANILLA | | | X | 26 30 | | X | | | X | | X | X | X | X | | X | X | X | X | 25 10 | X |
| VANILLIN | | | X |) ľ | X | X | | | X | | X | X | X | X | | | X | | X | | X |



Citrates, Lactates, & Gluconates

- pH Control: ensures consistency and quality by maintaining the desired pH levels in dairy products
- Antimicrobial Properties: keeps dairy products fresh and safe
- Acidification: aid in the acidification process, enhancing the flavor and stability of dairy products
- Sodium Reduction: used as a substitute for sodiumbased additives, helping to reduce the sodium content in dairy products





Distilled Spirits

- Flavor Enhancement: Distilled spirits like rum, whiskey, or vodka can add complex and rich flavors to dairy products, making them more appealing and unique
- Preservation: Alcohol acts as a preservative, extending the shelf life of dairy products by inhibiting the growth of bacteria and fungi
- **Texture Improvement**: Distilled spirits can enhance the texture of dairy products, providing a smoother and creamier mouthfeel
- Innovative Products: Incorporating distilled spirits into dairy products can lead to the creation of innovative and distinctive offerings, such as alcoholinfused ice creams or cheeses
- Sustainability: Using whey, a by-product of dairy production, to create distilled spirits helps reduce waste and promotes sustainability in the dairy industry



Emulsifiers

- Texture Enhancement: Emulsifiers help create a smooth and creamy texture by stabilizing the mixture of fat and water, preventing separation
- **Improved Stability**: Emulsifiers prevent the separation of ingredients, ensuring a consistent and uniform product
- **Extended Shelf Life**: Emulsifiers help extend the shelf life of dairy products by securing emulsion stability
- **Enhanced Mouthfeel**: Emulsifiers contribute to a pleasant mouthfeel by reducing the size of fat globules and improving the overall texture
- Fat Crystallization Control: Emulsifiers help control fat crystallization, preventing the formation of large ice crystals in frozen dairy products like ice cream





Enzymes

- Clean label stabilization: Ensures stability in yogurt and fermented beverages
- **High-protein milk beverages**: Improves solubility for better consumer experience
- High-quality hydrolysates: Derived from milk protein, offers added value with improved functionality and nonallergenic peptides
- Improvement of sensory profiles: Enhances taste and texture in dairy and plant-based beverages
- **Organic and non-GMO lactases**: Supports sustainable and natural production processes
- **Enhancing yield and quality**: Improves cheese making processes
- **Sugar reduction**: Effective in both dairy and plant-based beverages
- Wide portfolio of lactases: Caters to the demand for lactose-free dairy products, improving yield and quality



Hydrocolloids & Gums

- Natural hydrocolloids: ensures recognizable and wholesome ingredients in dairy and plant-based beverages
- **Emulsifiers**: improves the texture and stability of dairy products, as well as aid in particulate suspension
- **Gelling agents**: enhances the consistency and mouthfeel of yogurt and fermented beverages
- Organic-allowed and non-GMO hydrocolloids: promotes eco-friendly and health-conscious choices
- **Stabilizers**: maintains the quality and shelf life of dairy and plant-based beverages
- **Sustainable hydrocolloids**: promotes environmentally friendly practices in production
- Wide portfolio of hydrocolloids: caters to diverse consumer preferences, improving texture and quality





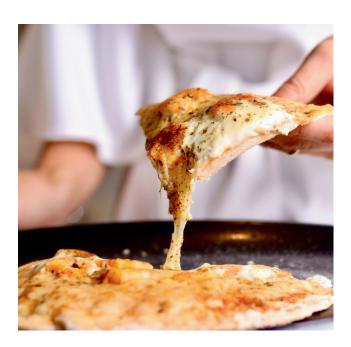
Natural Coloring

- **Healthier Alternatives**: Natural Colorings are derived from plants and contain antioxidants and bioactive compounds that promote health
- **Clean-Label Appea**l: consumers prefer products with simpler, more recognizable ingredients. Natural colorings align with this desire for transparency and cleaner labels
- Non-Toxic and Hypoallergenic: unlike synthetic dyes, natural colorings are generally safer for consumption and less likely to cause allergic reactions
- Sustainability: using natural sources reduces reliance on harmful petrochemicals, contributing to a cleaner environment
- Consumer Perception: the "natural" label often carries positive connotations, potentially influencing consumer preferences towards products using natural colors



Phosphates

- Improved Texture: enhances the smoothness and creaminess of dairy products, providing a more enjoyable sensory experience for consumers
- **Stabilization**: acts as stabilizers, preventing the separation of fats and oils, which helps maintain the consistency and quality of products like milk and cream
- Extended Shelf Life: contributes to extending the shelf life of dairy products by inhibiting the growth of bacteria and fungi
- **Enhanced Meltability**: improves the meltability, making cheese smoother and more uniform
- **Mineral Supplementation**: provides essential minerals like phosphorus, which are crucial for bone health and energy metabolism



Plant Proteins



- Nutritional Value: rich in essential amino acids, vitamins, and minerals; provides a healthy alternative to animal proteins, especially for those following vegetarian or vegan diets
- Digestibility: generally easier to digest and can be less likely to cause allergies compared to some animal proteins
- Sustainability: have a lower environmental impact compared to animal proteins; require less water, land, and energy to produce, making them a more sustainable choice
- Versatility: used in a wide range of products, from dairy alternatives like almond milk and soy yogurt to protein bars and meat substitutes
- **Health Benefits:** consuming plant proteins can help reduce the risk of chronic diseases such as heart disease, diabetes, and certain cancers

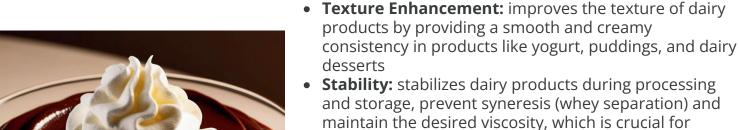


Salt

- Flavor Enhancement: improves the taste of dairy products by balancing sweetness and reducing bitterness
- **Preservation:** preserves dairy products by inhibiting the growth of harmful bacteria
- **Texture Improvement:** contributes to the texture of dairy products by binding water and modifying proteins
- Microbial Control: creates an environment that supports the growth of beneficial bacteria while suppressing unwanted microbial activity



Starches



 Shelf-Life Extension: extends the shelf life of dairy products by improving moisture retention and preventing spoilage for products ike cheese and milkbased beverages

products like yogurt and dairy-based sauces

- **Heat Tolerance:** withstands high temperatures during processing, ensuring that dairy products maintain their quality and consistency even after heat treatments
- Cost Effective: starches in dairy products can reduce production costs by enhancing process efficiency and minimizing waste





Sweeteners

- Natural sweeteners: recognizable and wholesome ingredients in dairy and plant-based beverages
- **High-intensity sweeteners**: provides sweetness without added calories
- Organic-allowed and non-GMO sweeteners: promotes eco-friendly and health-conscious choices
- **Sugar alternatives**: effective in both dairy and plant-based beverages for reduced sugar content
- **Sustainable sweeteners**: promotes environmentally friendly practices in production
- Wide portfolio of sweeteners: caters to diverse consumer preferences, improving taste and quality



Vanilla



- Flavor Enhancement: adds a rich, aromatic flavor that enhances the overall taste of dairy products like yogurt, ice cream, and custards
- Masks Undesirable Tastes: masks undesirable tastes in formulations with added nutrients or supplements, making products like protein-enriched yogurts more palatable
- Antioxidant Properties: contains vanillin, which has antioxidant properties that can contribute to the health benefits of dairy products
- Preservation: preserves dairy products by extending their shelf life while maintaining flavor
- Consumer Appeal: comforting and familiar flavor of vanilla increases the consumer appeal of dairy products, making them more enjoyable and marketable



Vanillin

- **Flavor Enhancement:** adds a rich, sweet, and aromatic flavor to dairy products like ice cream, yogurt, and flavored milk, making them more appealing to consumers
- **Antioxidant Properties**: exhibits significant antioxidant activity, which helps neutralize free radicals and reduce oxidative stress.
- **Anti-Inflammatory Effects:** according to research, vanillin possesses anti-inflammatory properties, which can help manage inflammatory conditions such as arthritis and inflammatory bowel disease
- **Antimicrobial Activity:** contains antimicrobial properties that can inhibit the growth of bacteria and fungi, helping to extend the shelf life of dairy products
- **Mood Enhancement**: mood-enhancing effects from the pleasant aroma, reducing stress and promoting relaxation







Explore our Comprehensive Food & Beverage Ingredients.

We proudly offer a diverse range of products tailored for the food and beverage industries. Explore our extensive product line and see how we can meet your needs.

Memberships, Awards & Certifications



























Our Tilley True™ Promise

Tilley True™ is our guarantee that business will be conducted with quality, integrity, and commitment every step of the way. It's a promise to our customers, our team members, and our industry peers. We constantly work to ensure our processes, services, and products meet the most exacting standards and expectations. Whether you are working with our team to source specialty ingredients or solve complex supply chain challenges, you'll see our Tilley True™ commitment in everything we do.



Download our brochure:
Dairy & Dairy Alternative Applications

