



# Acidulants

Univar Food Ingredients provides a full line of acidulants, which have multiple functions and unique properties for optimizing ingredient selection in the newest food applications. Acidulants are used broadly throughout the food industry for a variety of functions including flavor, pH control and preservation.

We represent an extensive portfolio of ingredients from the leading global suppliers, offering customers more options to achieve a successful reformulation. Our sales team and food specialists work directly with customers to share application experience that reduces the time necessary in developing new products.

*Fresh Ideas Start Here.™*



Questions? Contact us!  
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# Acidulants

Most food applications require an acidulant. An acidulant impacts flavor, shelf life, color stability and texture. This chart will support your efforts in characterizing the ingredient options.

Product	Form	Flavor	pH of 1% solution	Solubility	Function	Applications
Acetic acid	Granular / solution	Vinegar	2.77	Moderate	Flavor enhancer, pH control, preservative	Snack foods, dressings and processed meats
Adipic acid	Granular	Tart	2.80	Low	Leavening, starch modification, flavor enhancer, pH control	Bakery, specialty starches, gelatin desserts, fruit fillings, confections, cheese analogs
Ascorbic acid	Powder / granular	Citrus / sour	2.90	High	Vitamin, flavor, pH control, antioxidant	Food fortification in most food and beverage systems
Citric acid <sup>1</sup>	Powder / granular	Citrus / sour	2.23	High	Flavor, pH control, preservative, chelant	Highly compatible in most food and beverage systems
Erythorbic acid	Powder / granular	Tart	2.90	High	Flavor, antioxidant, pH control, preservative	Fruits and fruit fillings, confections, gelatin
Fumaric acid	Powder / granular	Bitter / sour	2.08	Low	Leavening, reduce pH, flavor, heat resistance, low hygroscopicity	Tortillas, bakery, confections, desserts
INNOVAFRESH™ Encap fumaric acid	Powder / granular	Bitter / sour	2.08	Low	Mold inhibition	Bakery products, tortillas
Glucono delta lactone (GDL)	Crystals	Mildly acidic	2.80	High	Leavening acid, flavor enhancer, pH control	Bakery, dressings, dairy, desserts, alginate systems,
Lactic acid	Powder / liquid	Mild taste	2.441	High	Preservative, flavor enhancer, antimicrobial, pH control, dairy compatible	Meats, snacks, confections, soups, dairy, salad dressings, bakery
Malic acid	Powder	Mildly tart	2.31	High	Flavor, preservative, pH control, synergistic with aspartame	Canned foods, syrups, gums, confections, preserves, gelatin desserts and snacks
pHase®	Granular	Mild taste	2.5	High	Preservative, pH control, sodium enhancement	Highly compatible in most food and beverage systems
Phosphoric acid	Liquid	Sour	1.63	High	Flavor, pH control, buffer	Cola beverages, salad dressings, vegetable oils, jams and jellies
Tartaric acid	Powder	Very tart	2.13	Low	Leavening acid, dough conditioner, flavor, pH control	Bakery, grape and lime flavored confections, beverages

<sup>1</sup>Anhydrous



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## Food acids flavor profile

