



ZweetTM
sucralose

Züeit™ Sucralose

LP Food Ingredients, a leading manufacturer of innovative ingredients in a global alliance with Ingredient Specialties, Inc. introduces Züeit™ brand Sucralose, a non-caloric, non-cariogenic, high intensity sweetener made from sugar. This free flowing and completely water soluble ingredient is 600 times sweeter than sucrose and because of its sugar-like appeal allows for its introduction in most food and beverage applications. Züeit Sucralose excels compared to other sweeteners because it exhibits many preferred, beneficial characteristics, including stability, extended shelf life, a wide range of potential applications, sweetening taste profile, health related benefits and positive safety record.

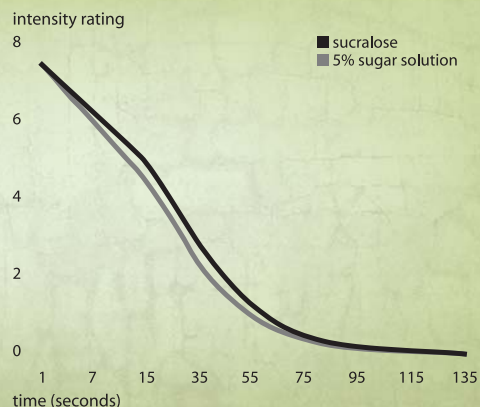
Worldwide Regulatory Approval

Sucralose was first introduced in North America (Canada) in 1991 and has since undergone some of the most rigorous and stringent testing resulting in its current safety record. It debuted in the U.S.A. as a "general purpose" sweetener in 1999 after approval by the Food & Drug Administration (FDA). Sucralose was later approved in the EU in 2004 (94/35/EC) and has subsequently been accepted for widespread use by several national and international food regulation safety bodies including the U.S. FDA, the World Health Organization (WHO) expert committee on food additives, the European Union (EU) scientific committee on food and others. Sucralose is now approved for use in foods and beverages in more than 80 countries worldwide.

Characteristics and Taste

Züeit Sucralose is a free-flowing white/off-white crystalline powder that blends easily with other dry ingredients or dissolves in aqueous solutions. It may be combined with bulking agents such as Polydextrose or Maltodextrin. In a world of high-intensity sweeteners in which many tend to leave an unfavorable

aftertaste, Züeit Sucralose leaves a clean, sweet finish in the mouth. In independent taste tests, sucralose was reported to have a similar taste and sensory profile to sugar. It may also be blended with other sweeteners to achieve specific taste profiles.



Images Source: Food Standards Agency, UK

Specific Application Possibilities

Züeit Sucralose can be used as a general purpose sweetener in most application areas. Sucralose is currently used in over 4,000 food, beverage and nutritional products, including the following categories:

Still beverages-juice drinks, iced teas
 Flavored waters
 Powdered beverage mixes
 Coffee and tea
 Condiments and relishes
 Cheeses
 Carbonated drinks/beverages
 Alcoholic beverages
 Processed fruits and juices
 Processed vegetables and vegetable juices
 Yogurts
 Ice cream & frozen dairy desserts
 Fats and oils
 Milk and dairy products
 Sorbets & ices
 Gelatins, puddings and fillings
 Canned fruit
 Jams and jellies
 Processed meats
 Baked goods and baking mixes
 Kettle popcorn
 Chewing gum
 Breakfast cereals
 Whey protein shakes/athletic drinks
 Table-top sweeteners/sugar substitutes
 Confections and frostings
 Pickles
 Gravies and sauces
 Snack peanut coatings
 Oral Rinses/Mouthwash
 Sunflower seed coatings

Sweet sauces, toppings and syrups
 Hard candy and cough drops
 Breath freshener films
 Herbs, seeds, spices, seasonings
 Soy sauce
 Nutritional bars
 Snack foods
 Soft candy
 Soup and dry soup mixes
 Nutritional products and dietary supplements
 Pharmaceutical syrups and tablets
 Pop-ice
 Lip balm/lip protection
 Toothpastes



Benefits at-a-glance

- Sugar-like taste profile
- Sweetener: 600 times sweeter than sugar
- Approved for use in more than 80 countries
- Calorie free - may be used by diabetics
- Zero Glycemic Index, Zero Carbs
- Used in more than 4,500 products
- Non-infringing manufacturing process
- Second largest manufacturer worldwide
- Excellent technical support and solutions
- Non-cariogenic – Oral Hygiene friendly
- Extraordinary stability: heat and pH
- High purity profile
- Applications: Food, Beverage,
- Cosmetic, Pharmaceutical
- Kosher and Halal Certified
- No warning labels required

| Nutrition Facts | |
|--|---------------------|
| Serving Size Serving Size Per Container | |
| Amount Per Serving | |
| Calories 0 | Calories from Fat 0 |
| % Daily Value* | |
| Total Fat 0g | 0% |
| Saturated Fat 0g | 0% |
| Trans Fat 0g | |
| Cholesterol 0mg | 0% |
| Sodium 0mg | 0% |
| Total Carbohydrate 0g | 0% |
| Dietary Fiber 0g | 0% |
| Sugars 0g | |
| Protein 0g | |
| Vitamin A 0% | Vitamin C 0% |
| Calcium 0% | Iron 0% |

*Percent Daily Values are based on a diet of 2,000 calorie diet. Your daily values may be higher or lower depending on your calorie needs.



Healthy Lifestyle Appeal

Weight management: Since sucralose is not metabolized and simply passes through the digestive system, Züeit Sucralose may be applied as a sweetening enhancement to diet foods which regulate calorie intake. This is an advantage to manufacturers with an ever increasingly health conscious target market. It can be reassuring to consumers to know that Züeit Sucralose does not contribute to the total caloric value of foods to which it is added.

Suitability for Diabetics: Züeit Sucralose benefits consumers on carbohydrate-regulated diets by positively supporting blood sugar and glycemic index regulation. Sucralose has no effect on glucose utilization, carbohydrate metabolism, the secretion of insulin, or glucose/fructose absorption.

Dental health/non-cariogenic: In recent studies relating to tooth decay within the food and beverage industry, concern has been directed toward the sugar content of smoothies and other popular blended drinks. Züeit Sucralose dispels this concern, being non-cariogenic and not contributing to tooth decay. Sucralose is the preferred sweetener in many oral hygiene products, including tooth pastes, mouth washes and specialized dental aids.

Application

Züeit Sucralose can be utilized in the food industry as a general purpose high-intensity sweetener. Unlike other non-sugar sweeteners, the unique attributes of Züeit Sucralose enable it to function in most formulations where sugar is traditionally used, making it suitable for a diverse range of products from carbonated beverages to baked goods to snack foods, to pharmaceutical preparations. Züeit Sucralose is freely soluble in water and alcohol, and exhibits excellent stability in acidic (low pH) applications, including processes where heat is applied. These characteristics are especially beneficial to its use in the beverage industry.





Stability

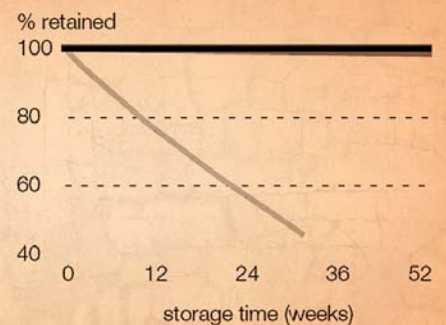
Extended Shelf Life: Züeit Sucralose exhibits a functionally long shelf-life, suitable for most food manufacturing. Its overall stability profile enables for its use in applications where other high-intensity sweeteners fail.

pH Stability: Züeit Sucralose's acid stability benefits the production of carbonated soft drinks, sauces, jellies, processed fruit drinks and other beverages.

Heat Stable: Züeit Sucralose is exceptionally heat stable, and is preferred for use in baking, canning, dairy products, pasteurization, aseptic processing and other manufacturing processes that require high temperatures.

Dry Application & Blending Stability: Züeit Sucralose exhibits preferred characteristics in dry applications as well, enabling functional shelf life to formulations including powdered beverages, ready-to-drink (RTD) products, instant foods, bakery and pharmaceutical dry mixes and as tabletop sweeteners.

Shelf Stability of Sucralose



- sucralose pH 4, 6, & 7, 20 C
- sucralose pH 3, 20 C
- aspartame pH 3.1 ambient temperature

Images Source: Food Standards Agency, UK



Ingredient Specialties, Inc. (ISI), in alliance with LP Food Ingredients, provides a global distribution network that markets Züeit brand Sucralose as a high intensity, non-caloric sweetener and other specialty ingredients to the food, beverage, nutraceutical and pharmaceutical industries.



ISI's world headquarters are located in the fertile San Joaquin Valley of Central California, in the city of Exeter. Local distribution partners provide timely access to ISI's products in most regions of the world.

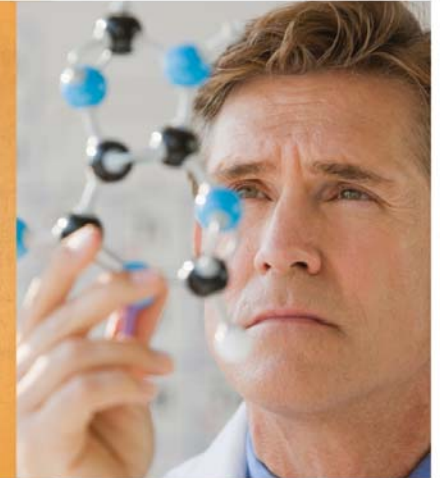
The corporate philosophy and culture at ISI always places the customer first, while stringent quality standards are meticulously maintained. ISI's staff is eager to support your successful growth and always looks forward to joining your team on your next important project!



LP Food Ingredients is a specialty ingredients manufacturer that pioneered the development and manufacturing of sucralose in china. LP Food Ingredients also engages in the production of many new and innovative nutraceutical and health food ingredients, including: polyphenols, functional food/dietary fibers and other natural and plant derived ingredients. LP Food Ingredients is headquartered in Guangdong province, China

Quality and Safety Protocols

Ingredients Specialties Inc. (ISI), worldwide distributor of Züeit Sucralose adheres to GMP and HACCP guidelines, and ensures that all lots are first analyzed and inspected at the manufacturing facility and also by an independent U.S.A. analytical laboratory prior to release for distribution to customers. All lots are accompanied by the related certificate of analysis (COA). Material Safety Data Sheets, detailed specifications, and other industry required documents are available, including Kosher, Halal, allergen and GMO free certifications. EU and other country-specific regulatory documentation are provided to customers when requested. Quality systems ensure full lot traceability, formal recall procedures and long-term retention of redundant, representative lot samples. Analyses including Thin Layer Chromatography and High Performance Liquid Chromatography verify the high purity and consistency of Züeit Sucralose.



Proprietary/Non-Infringing Manufacturing Process

Züeit Sucralose was the first sucralose manufactured outside the U.S.A. LP Food Ingredients' extensive scientific expertise and experience developing a proprietary non-infringing manufacturing process over the last several years, has enabled the research group to continually improve and streamline manufacturing systems. This results in a higher purity, batch consistency and manufacturing efficiencies that other offshore sucralose suppliers are still working to accomplish.

Safety of Sucralose

Over the past 25 years more than 100 studies relating to sucralose have been conducted that have clearly established the safety of this preferred sweetener. Studies and analyses have been conducted in all relevant use areas by numerous independent groups who have reported no safety concerns. Additionally LP Food Ingredients and ISI, through HACCP and GMP protocols, ensure that products receiving QA approval adhere to the highest purity profile with minimal batch-to-batch variation.

Facilities & Quality Certifications

The manufacturing facilities of Züeit Sucralose are ISO 9001:2000 certified and adhere to HACCP, GMP and cGMP standards. Züeit Sucralose meets the strict product specifications set forth by LP Food Ingredients. Established quality systems are in accordance with Title 21 CFR part 110, cGMP for human food and HACCP compliant standards.

Kosher and Halal Certification

Züeit Sucralose is certified by United States offices of KOF-K and IFANCA for Kosher and Halal use respectively.

Life is Züeit!SM

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For more information on ZüeitTM
brand Sucralose please visit

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ZüeitTM is a trademark of Ingredient Specialties, Inc.