

EdiSparklz[®] Brillos comestibles

Estas chispas muestran el aspecto divertido, colorido e inspirador de los brillos comestibles EdiSparklz[®], especialmente para aplicaciones de temporada, de oferta o por tiempo limitado.

INGREDIENTES DESTACADOS:

• EdiSparklz[®] brillos comestibles – para toppings e inclusiones coloridas

BENEFICIOS:

- 100% comestibles
- · Sin sabor, sin dulzor, sin calorías
- Estables a altas temperaturas, incluso horneo.
- Disponibles en hojuelas y formas
- Fabricados en una gama completa de colores naturales y/ó sintéticos
- Alternativa muy rentable a las opciones
- decorativas estándar





EXPERIENCIA EN FORMULACIÓN

Hacemos que la nutrición sea deliciosa. Colabore con nosotros para satisfacer las tendencias en productos alimenticios. Nuestro equipo de Investigación está a su disposición para asesorarle sobre formulaciones personalizadas que pueden mejorar la textura, el sabor y la nutrición. Formas -Disponible en paquetes de 0,7g a 5g

www.glanbianutritionals.com

Este prototipo ha sido procesado en una instalación que contiene alérgenos como lache, huevos, soya, trigo, frutos secos y pescado. La información contenida en este documento está destinada unicamente a la información edi destinativo y no ha sido verificada de forma independiente. Si bien Glanbia es esfuerza por garantizar que teda la información contenida en este documento sea correcta, no se garantiza que la información sea precisa y Glanbia no asume ninguna garantía conte la infranción de patentes, las responsabilidades o los riesgos relacionados con el uso de estos productos o información. Las declaraciones de propiedades saludables, si las hubiero, contenida en este documento son solo para fines ilustrativos y están sujetas a la aprobación de la autoridad reguladora pertinente en cada estado o país donde el comprador comercialica productos de consumo final.







Edible glitter for bakery products

Better nutrition, built around you.



Create Colorful, Eye-Catching Baked Goods With EdiSparklz®

Social media has become a key information source for consumers who want to be at the forefront of today's food trends. With 93% of consumers citing appearance as the most important purchasing factor¹, "Instagrammability" has become one of the most important metrics in modern marketing. This has led to a market focused on the use of bright or unexpected colors to attract consumers' attention, especially for seasonal and limited time only products (LTOs). EdiSparklz are the solution to achieve this, with 71% of survey respondents preferring the look of EdiSparklz to other decorative toppings/inclusions².

EdiSparkIz Solutions for Bakery Products

Thin and lightweight, EdiSparkIz Flakes and Shapes cover a lot of surface area and provide a bright pop of color. They have no flavor, no sweetness and no added calories. We manufacture a full spectrum of edible glitter shapes using standard, plant-based and metallic colorants.

EdiSparklz Flakes

Flakes are available in a variety of formulations depending on your application goals.



Standard & Plant-Based Flakes were created for those looking for a product with a bright pop of color. Flakes work well as toppings on frostings and icings as well as inclusions in breads, muffins, cookies, cake batter and cream filings.



Metallic Flakes were created for those looking for a product that has even more shine and shimmer. Metallic flakes work well as toppings on frostings and icings as well as inclusions in cream fillings.

Benefits for Bakery Applications

Formulation Advantages:

- Bake and freeze thaw stable; and will not melt or lose color or shape and holds up to the baking and extrusion process.
- Will stick to any slightly moist or oily surface.

Label Friendly: EdiSparkIz are allergen free and do not contain sugar, hydrogenated vegetable oil or any ingredients that appear on the USA Bioengineered Food list. Will not negatively impact your label. A great compliment for keto, paleo, Whole 30 and other nutritional lifestyle regimens.

Meets Label Requirements:

- Non-GMO
 Kosher
- Halal
 Gluten-free



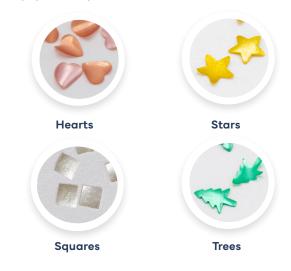
HALAL

Insights in Marketing, How Does Color Influence Consumer Behavior?, accessed 12 2019
 Glanbia Nutritionals U&A Survey, 2021.

www.glanbianutritionals.com

EdiSparklz Shapes

Available in over 40 different designs, Shapes work best as toppings. Some of our most popular shapes include:



Quick R&D Turnaround: Once you have added EdiSparklz it is easy to expand your look. Expand your look by swapping for a different colored glitter to compliment your new concept for an easy product extension.

Unique Appearance: Perfect for fast and attractive LTO's that display well on social media and against competitors.

Better Coverage: EdiSparklz achieve more surface area per pound of product than sprinkles. On average one pound of Flakes will replace 20-30 pounds of sprinkles, translating to cost savings.





TECHNICAL SNAPSHOT

EdiSparklz[®] APPLICATION THROUGH USE OF TOPICAL DISPENSERS

EdiSparklz are pure sparkle and magic. Compared to other decorative toppings, EdiSparklz adhere better to products, create less product waste, and allow for more control of product coverage.

Better nutrition, built around you.



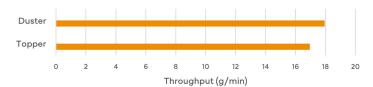
EdiSparkIz Topical Dispensing Methods onto Products

Thin and lightweight, EdiSparklz Flakes are created from edible polymers such as gum acacia (GA) and hydroxypropyl methylcellulose (HPMC). The resulting product is heat resistant and water soluble. EdiSparklz are ideal as visual cues for a wide array of food products as they readily adhere to products while providing high coverage per pound.

Topical Dispenser Application Tests

The two dispensers tested were the Topper and the Duster. The Topper uses a rotating distribution shaft to convey product past a rubber skirt, holding product inside the hopper. The Duster has a rotating agitator inside the hopper that conveys product to be dispensed over dispensing holes.

Comparing Dispenser Throughput Using 8 Mesh GA



Conclusion:

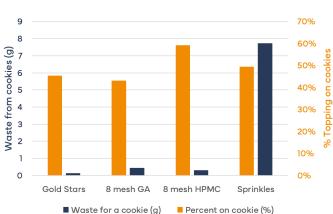
The conclusion is that both dispensers can easily target a specific coverage of size 8 mesh GA EdiSparklz. However, the Duster was unable to successfully dispense HPMC flakes due to their lighter weight and EdiSparklz shapes due to their size.

Product Coverage Control

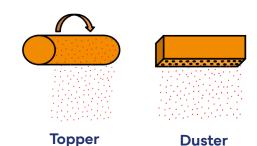
Different toppings were tested to determine dispensing throughput rate onto a stationary conveyer belt using the Topper.

Conclusion:

The conclusion is that due to the nature of EdiSparkIz being thin and lightweight compared to the sprinkles, which are heavier and rod shaped, you are able to have more control of product coverage dispensed.







Key Takeaways:

- Both dispensers can easily target a specific coverage of GA EdiSparkIz
- Significantly lower use levels than sprinkles for enhanced visual cues
- Improved adherence to product compared to sprinkles
- Reduced waste weight of product from dispensing



Sprinkles

8 Mesh GA

The images from left to right show 3" diameter cookies topped with sprinkles at an area of coverage 20.2 g/ft² and the center and right cookies are topped with 8 mesh HPMC and GA EdiSparklz at an area of coverage 1 g/ft².

8 Mesh HPMC

Product Waste Comparison

A comparison was completed on the level of waste that results from the dispensing process. The wasted product from the 3" diameter cookies was determined by weighing the toppings that did not land on the cookie surface.

Conclusion:

The waste data shows that less waste is generated by EdiSparklz compared to sprinkles. According to the graph, 8 mesh GA and HPMC EdiSparklz flakes waste was approximately 20x less compared to sprinkles whereas the gold stars shapes EdiSparklz had approximately 40x less waste.



www.glanbianutritionals.com/contactus



EdiSparklz™ EDIBLE GLITTER FOR FROZEN TREATS

EdiSparklz are pure sparkle and magic. Ideal for both toppings and inclusions, EdiSparklz can be used in a wide range of frozen treat applications to make your products stand out from the crowd.

glanbia nutritionals

See what's possible. Just add Glanbia.

EdiSparklz Provide Attention Grabbing Element For Impulsive Buyers

Although only 29% of consumers reported purchasing frozen treats on impulse alone, associated purchasing behaviors indicate that, while not listed as the main purchasing behavior, impulsiveness is a close secondary factor. The most cited driver for purchase was a promotion of a new flavor¹, Social media has become a key information source for those who want to be on the forefront of today's food trends. This has created a market for colorful food and drink that attract attention². EdiSparklz provide an eye-catching and unique visual element to catch consumers attention and to make your product truly "Instagrammable".



EdiSparklz Solutions for Ice Cream & Frozen Treats



EdiSparklz Flakes

Flakes are shiny, bright and have irregular shapes. Made of gum acacia, they have no flavor, no sweetness and add no calories. Flakes work well as toppings, compound coatings for enrobing and confectionery. Available in FD&C, EU and other edible colorants.



EdiSparkIz Natural Color Flakes

Natural Color Flakes are made from gum acacia and plant-based food colorants, such as cabbage juice, turmeric, spirulina, cocoa and radish. They have no flavor, no sweetness and add no calories. Flakes work well as toppings and within compounds coatings.



EdiSparkIz Metallic Flakes

Metallic Flakes are perfect for those looking for shine and shimmer. Metallic colors are made from gum acacia and mica-based pearlescent pigment and have no flavor, no sweetness and no added calories. They are water soluble and hold up well on products with low active moisture. Applications include toppings, compound coatings for enrobing and confectionery.



EdiSparkIz Shapes

Stock shapes include hearts, squares, hexagons, trees and daisies. Emoji shapes are also available. They are water soluble and hold up well on products with low active moisture. Applications include toppings.



Slow-Soluble EdiSparkIz

Designed for use in high-moisture systems. Applications include baking mixes where glitter is included in the batter, frozen desserts, confections where the glitter is added prior to boiling, and syrups.

Benefits for Frozen Treats

- Improved Nutritional Profile: Clean label, contains no sugar, no hydrogenated vegetable oil, has a short ingredient statement and is allergen free. Will not negatively impact your label.
- Formulation Advantages:
 - Bake and freeze thaw stable; it will not melt, lose its color and holds up to the baking and extrusion process.
 - · Will stick to any slightly moist or oily surface

MEET LABEL REQUIREMENTS

- Kosher
 Non-GMO
- Gluten-free
 - ee Halal





- **Unique Appearance**: Perfect for fast and attractive LTO's that display well on social media or against competitors.
- Lower Cost: Thin and lightweight flakes translate to cost savings
 - Achieves more surface area per pound of product than jimmies
 - Due to weight will save 20% on freight costs and warehouse space
- Quick R&D Turnaround. Once you have added EdiSparklz it is easy to change your look, just swap for a different colored glitter for a whole new look without added R&D time.

FORMULATION EXPERTISE

We make nutrition delicious. Collaborate with us to meet trends in baked goods. Our R&D team is available to advise on custom formulations that can enhance texture, flavor and nutrition.

> glanbia nutritionals

1. Mintel. Ice Cream and Frozen Novelties. US, May 2019. 2. Lightspeed/Mintel. Social media sets tone for color in the US. June 2019.

GLITTERICECREAM-SS-0820-2

+ 1 844 303 7304 • www.glanbianutritionals.com/contactus



TECHNICAL SNAPSHOT

EdiSparklz® SINGLE- AND TWO-STAGE COATING FOR EXTRUDED PRODUCT APPLICATION

EdiSparkIz are pure sparkle and magic. Ideal for use as a topical decoration on extruded cereal and snack applications using both singleand two-stage coating methods.



EdiSparklz Application Methods for Extruded Products

Thin and lightweight, EdiSparkIz Flakes are created from edible polymers such as gum acacia (GA) and hydroxypropyl methylcellulose (HPMC). The resulting product is heat resistant and water soluble. EdiSparkIz are ideal as visual cues for a wide array of food products as they readily adhere to products while providing high coverage per pound.

Key Takeaways:

- A wide range of mesh sizes (8-30 mesh) can be used
- High level of adherence to product
- No color bleeding
- High heat stable



8 mesh



20 mesh



30 mesh

Coating Processes

A wide range of application equipment is compatible with EdiSparklz, including drum coaters, which are a great method for applying EdiSparklz onto snacks, cereals, and pet food.



Single-Stage Coating

A single-stage coating process, using either an oil-based solution or sugar slurry with EdiSparklz included in the spray matrix, creates great product adherence with no color bleeding onto the product. The consistency of the single-stage EdiSparklz application will vary based on the EdiSparklz concentration in the spray solution and how the nozzle sprays the solution onto the product.



Oil Solution: Both gum acaia and HPMC glitter can be used in an oil solution. EdiSparklz' high temperature melt point makes it possible to include the glitter directly into the oil solution without melting or bleeding.

Sugar Slurry Solution: EdiSparklz' high temperature melt point makes it possible to include the glitter directly into the sugar slurry solution without melting or bleeding. However, only HPMC can be used in a sugar slurry solution due to the higher moisture content of a sugar slurry. A single-stage application using a sugar slurry is possible with a spray nozzle that is, ideally, 2x larger than the EdiSparklz glitter size.



Two-Stage Coating

A two-stage coating process provides a great product adherence with no color bleed onto the product. This application process also produced the most consistent coverage of the two methods. While both an oil-based solution and sugar slurry solution work in a two-stage coating process, the sugar slurry provided optimal tackiness for adherence. Depending on the porosity of the product being coated, different levels of coating solution may be necessary to make sure the product surface will allow for optimal EdiSparkIz adhesion.

Dry Addition: In two-stage coating either GA or HPMC EdiSparkIz edible glitter is added dry, ideally directly after the spraying stage. It is important to evenly distribute the EdiSparkIz across the product surface and for the addition to be directly onto the tacky product since EdiSparkIz will adhere to the first tacky surface it contacts.







EdiSparklz® EDIBLE GLITTER FOR BARS & SNACKS

EdiSparklz are pure sparkle and magic. Ideal for both toppings and inclusions, EdiSparklz can be used in a wide range of bar and snack applications to make your products stand out in this increasingly competitive market.



Social Media is a Big Influence On Purchase Decisions¹, Creating a Market for Colorful Food and Drinks That are Eye Catching

Social media has become a key information source for consumers who want to be on the forefront of today's food trends. With 93% of consumers citing appearance as the most important purchasing factor², "Instagramability" has become one of the most important metrics in modern marketing. This has led to a market focused on the use of bright or unexpected colors to attract consumer's attention, especially for seasonal and limited time only products (LTOs). Make your next bar or snack pop with EdiSparkIz edible glitter.

EdiSparklz Solutions for Bar & Snack Products

EdiSparkIz Flakes

Thin and lightweight, EdiSparklz Flakes cover a lot of surface area and provide a bright pop of color. They have no flavor, no sweetness and no added calories. We manufacture a full spectrum of colored glitter products using standard and plant-based colorants. Flakes are available in a variety of formulations depending on your application.



Standard & Plant-Based Flakes work well as a bar inclusion, in its enrobed compound coating or as a bar topping. Flakes also work as a snack topping or inclusion.



Metallic Flakes were created for those looking for a product that has even more shine and shimmer. Metallic EdiSparkIz are made with mica-based pearlescent pigment and work well as an inclusion in a bar compound coating or as toppings for bars and snacks.

Benefits for Bar & Snack Applications

Formulation Advantages:

- Bake and freeze thaw stable; it will not melt, lose its color and holds up to the baking and extrusion process.
- · Will stick to any slightly moist or oily surface

Lower Cost: Thin and lightweight flakes translate to cost savings, achieving more surface area per pound of product than sprinkles.

Unique Appearance: Perfect for fast and attractive LTO's that display well on social media or against competitors.

FORMULATION EXPERTISE

We make nutrition delicious. Collaborate with us to meet trends in baked goods. Our R&D team is available to advise on custom formulations that can enhance texture, flavor and nutrition.



EdiSparklz Shapes

Made from cutting shapes out of film, EdiSparklz Shapes are also thin and lightweight, and are available in over 40 different shapes. We manufacture a full spectrum of edible glitter shapes using standard, plant-based and metallic colorants. They have no flavor, no sweetness and no added calories and work well as toppings. Some of our most popular shapes include:



Improved Nutritional Profile: EdiSparkIz are allergen free and does not contain sugar, hydrogenated vegetable oil and any ingredients that appear on the USA Bioengineered Food list. Will not negatively impact your label. A great compliment for keto, paleo, Whole 30 and other nutritional lifestyle regimens.

Quick R&D Turnaround. Once you have added EdiSparkIz it is easy to change your look, just swap for a different colored glitter for a whole new look without added R&D time.

MEET LABEL REQUIREMENTS

- Kosher
 Non-GMO
- Gluten-free
 Halal



1. Lightspeed/Mintel. Social media sets tone for color in the US. June 2019. 2. Insights in Marketing, How Does Color Influence Consumer Behavior?, accessed 12 2019



EdiSparklz™ EDIBLE GLITTER FOR BEVERAGE TOPPINGS

EdiSparklz are pure sparkle and magic. Ideal toppings, EdiSparklz can be used to make your products stand out from the crowd.

See what's possible. Just add Glanbia.



Social Media Is A Big Influence **On Purchase Decisions¹, Creating** A Market For Colorful Food and **Drinks That Are Eye Catching**

Social media has become a key information source for consumers who want to be on the forefront of today's food trends. With 93% of consumers citing appearance as the most important purchasing factor², "Instagramability" has become one of the most important metrics in modern marketing. This has led to a market focused on the use of bright or unexpected colors to attract consumer's attention, especially for seasonal and limited time only products (LTOs). Create a distinctive look for your next beverage with EdiSparklz edible glitter.

EdiSparklz Solutions for Beverage Toppings

EdiSparklz Flakes

Flakes are shiny, bright and have irregular shapes. Made of gum acacia, they have no flavor, no sweetness and add no calories. Flakes are water soluble and hold up well on products with low active moisture. Availble in a variety of polymers based on application



Artificial Color Flakes

Available in a variety of single colors and blends.



Plant-based Color Flakes

Plant-based colors are made with food colorants such as cabbage juice, turmeric, spirulina, cocoa and radish.



Metallic Flakes

Metallic colors are made from gum acaia and mica-based pearlescent pigment.

Benefits for Beverage Applications

- Improved Nutritional Profile: Clean label, contains no sugar, no hydrogenated vegetable oil, has a short ingredient statement and is allergen free. Will not negatively impact your label.
- Unique Appearance: Perfect for fast and attractive LTO's that display well on social media or against competitors.

MEET LABEL REQUIREMENTS

- Kosher
 - Non-GMO Halal







EdiSparklz Shapes

Shapes are made from cutting shapes out of film. They have no flavor, no sweetness and add no calories. Shapes are water soluble and hold up well on products with low active moisture. Shapes are available in artificial and metallic colors.



Standard Shapes

Standard shapes include, but are not limited to, stars, squares, dots, trees and daisies.

Emoji Shapes

Emoji shapes include smiley faces, poop, hearts, ghosts and kissy lips.

• Lower Cost: Thin and lightweight flakes translate to cost savings

- Achieves more surface area per pound of product than sprinkles
- Customers save an average of 10% on topping costs by switching
- Quick R&D Turnaround. Once you have added EdiSparkIz it is easy to change your look, just swap for a different colored glitter for a whole new look without added R&D time.

FORMULATION EXPERTISE

We make nutrition delicious. Collaborate with us to meet trends in food and beverages. Our R&D team is available to advise on custom formulations that can enhance texture, flavor and nutrition.



1. Lightspeed/Mintel. Social media sets tone for color in the US. June 2019. 2. Insights in Marketing, How Does Color Influence Consumer Behavior?, accessed 12 2019

GLITTERBEVTOPPING-SS-0121-1



EdiSparklz® GLITTER PACKETS

EdiSparklz are pure sparkle and magic. EdiSparklz glitter packets are ideal for creating a unique, at-time-of consumption experience for multi-serving and multi-pack products.



Social Media is a Big Influence On Purchase Decisions¹, Creating a Market for Colorful Food and Drinks That are Eye Catching

Social media has become a key information source for consumers who want to be on the forefront of today's food trends. With 93% of consumers citing appearance as the most important purchasing factor², "Instagramability" has become one of the most important metrics in modern marketing. This has led to a market focused on the use of bright or unexpected colors to attract consumers' attention, especially for seasonal and limited time only products (LTOs) with products featuring "add-ons" demonstrating an above average purchase intent³. Make your next product pop with EdiSparkIz edible glitter.



Glitter Packets

EdiSparklz Packets offer a new and innovative delivery method for EdiSparklz. Increase consumer engagement with a unique, at-time-of-consumption experience. Simply open the packet and sprinkle it to decorate before consuming.

Packets are made from food contact safe material and are available in a range of sizes from 0.7g to 5.0g, with custom sizes



Available in 1g - 5g packets



Shapes - 0.7g shown Available in 0.7g - 5g packets

Our full color spectrum of colored flakes and shapes are available for use. Custom color and shape blends are also available upon request. Applications include baked good & baking kits, frozen waffles & panckaes, hot & cold cereals, frostings & decorating kits, yogurt, pudding and ice cream multipacks.

Benefits for Glitter Applications

available depending on your application.

Formulation Advantages:

- Bake and freeze thaw stable; it will not melt or lose color and holds up to the baking and extrusion process.
- · Will stick to any slightly moist or oily surface

Lower Cost: Thin and lightweight flakes translate to cost savings, achieving more surface area per pound of product than sprinkles.

Unique Appearance: Perfect for fast and attractive LTO's that display well on social media or against competitors.

FORMULATION EXPERTISE

We make nutrition delicious. Collaborate with us to meet trends in baked goods. Our R&D team is available to advise on custom formulations that can enhance texture, flavor and nutrition. **Improved Nutritional Profile**: EdiSparkIz are allergen free and do not contain sugar, hydrogenated vegetable oil and any ingredients that appear on the USA Bioengineered Food list. Will not negatively impact your label. A great compliment for keto, paleo, Whole 30 and other nutritional lifestyle regimens.

Quick R&D Turnaround. Once you have added EdiSparklz it is easy to expand your look, just swap for a different colored glitter for an easy and unique product extension without added R&D time.

MEET LABEL REQUIREMENTS

- Kosher
 Non-GMO
- Gluten-free
 Halal



1. Lightspeed/Mintel. Social media sets tone for color in the US. June 2019. 2. Insights in Marketing, How Does Color Influence Consumer Behavior?, accessed 12 2019. 3. Mintel GNPD.

EdiSparklz® EDIBLE GLITTER FOR SUPPLEMENTS

EdiSparklz are pure sparkle and magic. Ideal for use as inclusions in a wide range of supplement applications to make your products stand out on the shelves.



Edi

Social Media is a Big Influence On Purchase Decisions, Especially for Younger Generations

Gen Z and Millennial consumers tend to be less brandloyal when it comes to purchasing vitamin, mineral, and supplement (VMS) products, making them more open to being swayed by marketing and influencers they see on social media¹. This has led to a market focused on the use of bright or unexpected colors to attract consumers' attention, especially for younger generations looking for new and innovative supplement products that combat pill fatigue. Create a distinctive look for your new VMS product with EdiSparkIz edible glitter.

EdiSparklz Solutions for Supplements

EdiSparkIz Flakes

Thin and lightweight, EdiSparklz Flakes cover a lot of surface area and provide a bright pop of color. They have no flavor, no sweetness and no added calories. We manufacture a full spectrum of colored glitter products using standard and plant-based colorants. Flakes are available in a variety of formulations depending on your application.



Standard & Plant-Based Flakes work well as inclusions in tablets, tablet coatings, gummies, chewables, effervescents, soft gels, gelcaps, powders and boiled lozenges.



Metallic Flakes were created for those looking for a product that has even more shine and shimmer. Metallic EdiSparkIz are made with mica-based pearlescent pigment and work well as inclusions in tablets, gummies, chewables, effervescents, soft gels, gelcaps, powders and boiled lozenges.

Benefits for Supplement Applications

Formulation Advantages:

- Glitter is heat resistant to 450°F, and will not melt or lose color or shape when added to boiled lozenges or gummies.
- Glitter can be directly included into a tablet or compound coating.

Unique Appearance: Perfect for fast and attractive products that display well on social media or against competitors.

FORMULATION EXPERTISE

We make nutrition delicious. Collaborate with us to meet trends in supplements. Our R&D team is available to advise on custom formulations that can enhance texture, flavor and nutrition.

EdiSparkIz Shapes

Made from cutting shapes out of film, EdiSparkIz Shapes are also thin and lightweight, and are available in over 40 different shapes. We manufacture a full spectrum of edible glitter shapes using standard, plant-based and metallic colorants. They have no flavor, no sweetness and no added calories and work well as inclusions in gummies and boiled lozenges. Some of our most popular shapes include:

of consumers

purchased a VMS

product based on the



Improved Nutritional Profile: EdiSparkIz are allergen free and do not contain sugar, hydrogenated vegetable oil and any ingredients that appear on the USA Bioengineered Food list. Will not negatively impact your label. A great compliment for keto, paleo, Whole 30 and other nutritional lifestyle regimens.

Quick R&D Turnaround. Once you have added EdiSparkIz it is easy to expand your look, just swap for a different colored glitter to compliment your new concept for an easy product extension.

MEET LABEL REQUIREMENTS

- Kosher
 Non-GMO
- Gluten-free
 Halal



nutritionals



GLITTERSUPPLEMENT-SS-0123-1