Fully Biodegradable Grocery and Trash Bags

Feb. 4th, 2020
We bring to our clients a wealth of knowledge about global product sourcing. This includes strategy, quality assurance, and operational advice. ET2C provides tangible solutions to maximize value to our clients’ bottom line. We mitigate inherent risks associated with global product sourcing.

ET2C offers multi-category product sourcing services to medium-large companies, to include suppliers and retailers, seeking quality-assured products from around the globe.

We provide our clients with access to low-cost country manufacturing (e.g. China, India, Mexico, Turkey, Malaysia, South Korea, Vietnam, etc.).

Our objective is to deliver long-term sustainable value to our clients’ bottom lines by directing their purchasing to the highest quality, lowest cost, innovative factories that meet or exceed their product sourcing requirements.

With a direct focus on service, we deliver tailor made “at the source” management solutions. With access to a global product supply source, ET2C can offer you unlimited product options.

The products in this presentation are just a small sample of our capabilities. Please contact us for additional product information on other categories and product groups.
State of the Plastics Industry

Calendar Year 2020

Plastic Bags Today

• **Biodegradable Market** – expected to exceed $133 billion by 2023

• **Relentless Pressure** – suppliers are subject to worldwide demand from consumers and governments for sustainable plastics

• **State of Flux** – countries and their environmental agencies are developing ever changing material sustainability standards and laws

• **New Plastic Products** – ongoing plastic development and testing by academic institutions and laboratories for alternative solutions

• **Outright Bag Bans** – shopping bag bans with industry-wide ripple effect
Looking Forward

- **Millennial Action (ages 15-35)** – representing 37% of the world’s population... they share a deep concern about environmental issues, and want action

- **Recycling Up-Tick** – nations are mandating country-wide increases in overall recycling rates

- **Design for Reuse** – packaging is increasingly being designed for reuse

- **Bioplastic Utilization** – increased use of bioplastics to replace fossil-fuel-based plastics

- **Paper Is BACK!** – paper-based products are replacing plastic in many markets... causing severe supply issues and net-loss of forests
Biodegradable Defined – anything that undergoes aerobic or anaerobic degradation from the action of naturally occurring microorganisms such as bacteria, fungi, and algae. Ideally the final product is water, CO2, and biomass.

Compostable Defined – means a product is capable of breaking down into natural elements in a compost environment. The environment is controlled, and pressure, light, heat and moisture is critical for success.

Time Differences – anything biodegradable will breakdown quickly and safely into harmless compounds whereas compostables will undergo degradation by biological process in about 90-days.
Biodegradable Plastic Advantages

Superior technology for the planet

Environmental Benefits

- **Open Environment Degradation** – the bags will biodegrade in a normal, everyday environment
- This relates to the massive quantities of land and sea-based plastic waste that can’t be collected and buried
- **Composting** – the biodegradable bags can be composted... where required by law
- **Landfill Burial** – not required for biodegradation to occur
- **Zero Residue** – once fully degraded, the bags do not leave toxic residue or plastic fragments
- **No Harmful Bi-Products** – zero environmental impact
Natural Plasticizer Materials – composed of renewable natural materials (e.g. corn starch, agave, p200 and other organics)

Microorganism Decomposition – anaerobic biodegradation of the bag plastic is driven mainly by bacteria

Earth Friendly Bi-Products – the environmental decomposition process produces inorganic compounds, CO2, water, methane and natural biomass through bacterial enzymatic action

ASTM D6954 & D5526 Certified – tested and certified under open environment and landfill conditions to degrade through oxidation and enzymatic biodegradation

Behind the curtain

Our Product Science
Our Product Overview

NaturePlast biodegradable plastic bags

NaturePlast Bio-Plastics

- **Proprietary Plastics** – 100% biobased, 100% biodegradable, and 100% eco-renewable
- **Manufactured in Mexico** – using latest technology in organic-based materials
- **ASTM Certified** – plastic material meets numerous testing standards for biodegradable plastics
- **Total Material Degradation** – occurs at the 27th week
- **Bag Configuration Options** – shopping, grocery, trash, lawn, etc.
- **Bag Colors** – multi-color options available
- **Branding or your brand available**
Shelf-Life Considerations

- **Limited Shelf-life** – the plastic bags by design have a limited shelf-life and therefore should not be stocked for more than 12 months.

- **Sunlight Averse** – NaturePlast products should not be left in direct sunlight for extended periods.

- **Temperature Ceiling** – do not store at temperatures above 50°C/122°F.

- **Additional Product Testing** – ET2C has access to certified laboratories should you require additional product testing data.

- **Your Packaging Requirements** – we package to meet your category needs.

Our Product Storage

NaturePlast has a limited life... and that’s a good thing.
Your competitors are not integrated in their distribution of full biodegradable bags. New technology and new opportunities for you!

Summary

NaturePlast... helping reduce the world’s plastic bag pollution problem

Points to Remember

- **Emerging Product Category** – you have to decide where to start... rest easy... NaturePlast bags won't harm the earth or the critters on it; but you must get into this arena

- **Environmentally Safe** - certified to be 100% compostable and 100% biodegradable... NaturePlast bags chemically break down into harmless CO2 and H2O at the 27th week... leaving no trace

- **Full line availability** – NaturePlast grocery bags are thick enough for your customers to haul groceries home... and can then repurpose them for wastebasket liners or compost bags. We have all sizes available.....and printing capable
Additional NaturePlast Products

Beyond Bags

Trash/Retail Bags

Plates

Food Containers

Resi-PET Containers

Cups/Glasses

Straws and more

Paper Food Trays

Cutlery
Product Cost & Availability

NaturePlast... reducing the world’s plastic bag pollution problem...

Order Details

- **Lead time** – 60 days for first order after signed off approved artwork is own brand
- **Art Requirements** – Style and graphic guide for packaging direction
- **Order Minimums** – $1500
- **Freight** – FOB Factory Mexico
- **Reorders** – Minimum $1500
- **Trade Agreement** favorable
- Can mix styles and sizes on same order
DROP US A LINE

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