GOEX Sheetline

QUALITY CUSTOM PLASTIC SHEET

Volume 18



GOEX

802 US Highway 14 East Janesville, WI 53545

This Issue

- Personally from the President: GOEX In the Mix • Page 1
- Recycling Codes • Page 2
- The Color White (and Opacity) • Page 2
- Packaging Trends • Page 3
- Plastics Quiz • Page 4

Personally from the President

GOEX has earned a solid reputation as an innovative plastic extrusion company. We are proud of the quality of our products and people, and the part we play in our local community, the plastics industry and the world as a whole. Our success is dependent on our commitment to continuous improvement, providing the best solutions for our customers, and empowering our employees to deliver results at the highest level of integrity.

As part of the Janesville community, GOEX has experienced continued growth that's prompted the need for additional personnel, equipment, technologies and building space. We are active members in the Forward Janesville movement to help ensure the continued health and prosperity of business and industry in Janesville and Rock County, Wisconsin.

This month, we are experiencing the power of community at the Rock Regional Business Expo, showcasing GOEX as a valued, local employer attracting and keeping talent home. Also in October, GOEX is a tour destination on National Manufacturing Day, providing area high schoolers the opportunity to see real-life manufacturing in action and offering them the chance to interact with our manufacturing professionals on-site.

In the extruded plastics manufacturing arena, GOEX is committed to continuing to develop the

best products and services in our industry. We are the industry leader in extruding quality custom rigid plastic sheet and roll stock products, producing our plastics in a controlled environment with a strong emphasis on quality and safety practices.

As a proper steward of our planet, GOEX continually strives to minimize the environmental impact of our products. Our sustainability strategy ensures operations and business practices are environmentally sound. As part of GOEX's zero landfill operating philosophy, we reprocess materials by incorporating production scrap and customer returned scrap back into saleable products, avoiding landfills altogether.

Read more on industry trends, how you can aid recycling efforts and even test your plastics knowledge inside this latest edition of our newsletter. And always know, GOEX is here with innovative solutions that help deliver your products to market.



Regards,

Joshua D. Gray President & CEO, GOEX Corporation

Do Your Part. **Recycle**. (Properly)

The well-recognized "chasing arrows" symbol we see on plastic containers and products does not necessarily mean the product is recyclable. The little number inside the triangle is what tells the real story. Understanding these codes makes it easier to know which plastics to recycle. Standard classifications for plastics and the recycling info for each type are:



PETE or PET (Polyeth ylene Terephthalate) is one of the most commonly used plastics in

consumer products It is found in most water and soft drink bottles. Intended for single-use applications, PET should be recycled, but not reused.



HDPE (High-Density Polyethylene) is hardwearing and doesn't break down under ex-

posure to sunlight or extremes of heating or freezing. Used to make products that require durability and weatherresistance, this most commonly recycled plastic is reusable.



PVC (Polyvinyl Chloride) is a soft, flexible plastic used to make some clear plastic food wrap-

ping and blister packaging for a myriad of consumer products. While PVC products can be repurposed, they should not be reused for applications with food or for children's use.



Double White, Triple White, Trans White, Dead White or Yeezy White? Just kidding on that last one, but some customers purchase plastic sheet (or tennis shoes) these days based on a specific color of white. Some of it has to do with opacity.

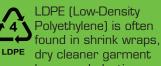
Miriam Webster defines opacity as: "the state or quality of being opaque", meaning not transparent or translucent; impenetrable to light or not allowing light to pass through.

So, what does this have to do with a sheet of plastic? A lot, when you think about the final product. The importance of clarity and opacity varies based on the desired application. Think about why certain products are opaque.

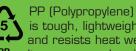
In some cases, an opaque plastic container protects its contents from harm that can come from light exposure. Such is the case with milk containers. If a store sign is printed on two sides, the more opaque the sheet is, the better the readability. Fresh food is often packaged in plastic containers that allow you to see what you are buying. So a more translucent white is used.

GOEX has a variety of "whites" for you to choose from in our Plastic Sheet Stock Program. Check out the full spectrum at goex.com and get quality sheets shipped within 24-48 hours.

Be sure to talk with one of our knowledgeable Sales Account Managers to find the perfect shade of white (or many other colors) to make your next project pop!



bags, and plastic grocery bags. When recycled, LDPE plastic is used for products that are not as hard or rigid as those made using recycled HDPE plastic.



is tough, lightweight and resists heat well. It serves as a barrier against moisture,

grease and chemicals helping keep food fresh. Commonly used for disposable to-go containers and yogurt cups, PP is considered safe for reuse.



PS (Polystyrene, also known as HIPS) is used in food packag-

ing, point-of-purchase displays and in-store signage. It can contain recycled content. While recycling is not widely available via curbside collection, GOEX purchases scrap for reuse.



Plastic Packaging Trends: 2018

Candy and snacks are big business in this country. The industry boasts approximately \$35 billion in annual sales, accounts for 465,000 jobs and brings about \$10 billion in tax dollars into the U.S. Treasury's coffers, according to the National Confectioners Assn. (NCA).

Trending this year in the Food & **Beverage Packaging Industry:**

Multi-Part Munchies

A number of manufacturers feature packages with multiple components, separating the ingredients until the consumer is ready to mix.

The reasons for this division range from keeping crunchy parts from moisture, to delivering an interactive experience.

GOEX manufactures quality custom plastic sheet and roll stock that is certified by the

FSSC to be used in food-safe packaging.



Trending this year in the Medical **Device Packaging Industry:**

Compliant AND User-Friendly

Given the life-saving and life-sustaining nature of medical devices, packaging plays a significant role in protecting the integrity of the device while promoting safe and effective use.

The aging population offers significant opportunity for medical device manufacturers. Per a report by *MarketWatch*, the global medical device market is expected to reach \$409.5 billion by 2023, and is forecast to grow at a compound annual growth rate of 4.5% until then.

Medical device packaging has some of the strictest regulations. Healthcare companies must follow these guidelines and offer user-friendly packaging too. Rigid plastic material packaging helps users maintain a firm grip, gives more control and reduces the risk of contamination while presenting devices onto a sterile field.

Trending this year in the Consumer **Packaging Industry:**

More Feminine-Style vs. Hyper-Masculine

Cosmetics, personal care products and healthcare items make up a significant portion of sales of packaging materials. These products are among the most innovative, too, when it comes to packaging because sometimes it is all about good looks.

And it's a big genre! The global personal care market was estimated to reach \$28.2 billion by 2018, growing for the five years up to then, according to research from Smithers Pira Health. Plus, wellness continues to be a top concern of consumers as the population ages.

As more soothing pastels and soft edges moved into the spotlight in 2018, packaging design has trended toward a more feminine overall aesthetic. As a result, we've seen fewer super-stimulating, explosive design styles more closely associated with masculinity than in past years. Lightweight plastic improves that vibe.

Here at GOEX, we welcome innovation in packaging design. Our quality, engineering, sales and customer service teams look forward to working with customers to bring the latest in material development in line with regulations and trendsetting package design. Who knew packaging could be so exciting?

bonate and LEXAN) is a catch-all for **OTHER** polycarbonate (PC) and "other" plastics used to make things like iPod and computer cases, DVDs and bottles. Reuse and recycling protocols are not standardized within this category.

Other (BPA, Polycar-

As you can see, products made using some types of plastic are reusable, but not always recyclable. It is up to each of us to read and understand the recycling codes. Check with your local collection service to see what kind of plastic items they are accepting for recycling.

By understanding these simple classifications, we can use plastics to our advantage and minimize any disposal issues. GOEX, as part of the plastics industry, abides by regulations for the manufacture of plastic materials. As part of our Zero Landfill program, we

regrind100% of GOEX customers' scrap they choose to recycle. We purchase virgin material and add recycled plastic in choice product as part of our offerings, saving customers money and helping do our part to preserve the environment.



What Do You Know About Plastic?

It's no secret that plastic is lighter than steel. But did you know it can be stronger too? Take this quick quiz and test your plastics knowledge. Let's see how smart of a consumer you really are.

> **Q1** Some plastics can absorb _____ times as much energy as steel.

A1 Reinforced plastics can absorb more than 5 times as much energy as steel. That's why lightweight plastic components are incorporated into parts on cars, for example. There's a common misconception that a heavier car is automatically a safer car. In reality, heavier materials can pose more damage because force and impact transfer directly to surrounding objects.

STAND STRONG -

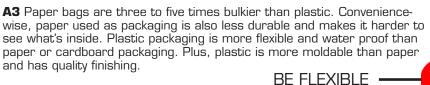
Q3 Paper is <u>times</u> more bulky than plastic.

TAKE A LOAD OFF -

2

Q2 A 10% weight reduction in volume can increase fuel economy by _____% when shipping items.

A2 Reduced weight equates to lower shipping costs. By using plastic packaging that is lighter weight than cardboard, you can save money on fuel required to ship your products to end users. Cost, durability and flexibility are the key characteristics considered the most important among materials handling and logistics managers.



KEEP IT FRESH

Q4 Fresh produce will last <u>times longer</u> in plastic packaging than when left out.

A4 Some might think the plastic packaging of food is wasteful. The truth is, plastic can nearly triple the amount of time vegetables stay fresh by keeping the bad stuff out and the good stuff in. Plastic packaging can also help prevent food waste by making food look and taste fresher longer.





Λ

Q5 The environmental cost of plastic in consumer goods is _____ times less than alternative materials that would be needed to replace plastic.

A5 Although materials like glass, tin, aluminum and paper are viable alternatives to plastic in some consumer goods applications, they have higher environmental costs in the quantities needed to replace plastic. On average, over four times more alternative material is needed (by weight) to perform the same function. For example, a typical plastic soft drink bottle contains 30 grams of plastic. If replaced by alternative materials, an equivalent capacity bottle would require 141 grams of glass, tin or aluminum.

SAVE THE PLANET -



If plastics can help make your food last longer, and your car safer, lighter and more fuel-efficient, imagine how they can benefit your product packaging. Contact a GOEX Sales Account Manager to find smarter ways to use plastic to your advantage today. You'll be able to protect better, ship cheaper and reduce your carbon footprint along the way. Swifter, stronger, smarter and safer always win out!



WEST

3

February 5-7, 2019 Anaheim, CA

Medical Design & Manufacturing (MD&M) West is where serious professionals find the technologies, education, and connections to stay ahead in the global medical manufacturing community. Cutting-edge suppliers showcase the latest solutions in device components, materials, plastics, and more.

Visit GOEX at Booth 2133

GOEX Corporation 802 US Highway 14 East Janesville, WI 53545

(608) 754-3303 Phone (608) 754-8976 Fax

in f

Produced by: Think Patented, Miamisburg, OH Production Notes Stock: GOEX CAROM[®] 45 PVC Press: Heidelberg XL-106 with Full UV