Acucote Insights:
SUSTAINABLE MATERIALS
Introduction
In today’s marketplace, your customers are demanding long-term solutions so that brand owners can reduce environmental impacts and climate change. The abundance of terms and product options used in the “sustainability movement” can be complex and confusing. This movement is based around the use of materials and methods that promote, recycle, reuse and limit the impact on the environment.

Our Application Development Team frequently helps converters become “Sustainably Savvy” by providing general guidance on the common terms and product options that enable them to take the next step in solving their customers’ sustainability inquiries. We’ve captured and defined some key product terminology for this issue of “Acucote Insights.”

Product Descriptions and Recommendations

RECYCLABLE
Primarily paper or plastic products that can be treated or processed for reuse. Materials must go into an established processing stream such as a recycling bin. As a result, these materials can be recovered and remanufactured into similar materials. Some polyesters are recyclable but there are not many outlets for polyester recycling. However, techniques for recycling adhesive coated polypropylene are being developed. Uncoated paper is naturally recyclable but Acucote adhesives and coatings are generally not recyclable. They interfere by creating scrap in the paper making process.

Recommendation: Acucote can source facestocks and recyclable adhesives for your application.

REPULPABLE
Materials that can be used to remanufacture paper. Some labels with a paper face and a repulpable adhesive can be remanufactured into paper using the conventional pulping process.

Recommendation: Acucote GPX, GR7 and Arctic adhesives are certified repulpable and when used with paper facestocks are sustainable options.

FSC CERTIFIED
Paper products made from forests that are managed to be sustainable. FSC COC certified recyclable content and reclaimable materials come from wood that has been harvested with little impact on the climate. Most paper products are now available to purchase as FSC certified.

Recommendation: Acucote’s popular offerings include 60# Semi Gloss, 60# Matte Litho and thermal transfers. FSC certified 40# and 50# CCK liners are also available.

RECYCLED CONTENT
Paper and film products that contain some percentage of recycled material. Material can be created from pre or post-consumer waste products. The paper waste products are made into pulp and then again into paper. The film waste products are melted down and made into more film.

Recommendation: Acucote offers 60# Hemp paper that is made from 75% post-consumer wood. 60# Uncoated paper is created with 100% post-consumer waste and 8pt Recycled C1S is created with 10% post-consumer waste. .92, 1.2 and 1.5 mil PET liners are created with 30% recycled resin. Additional materials can be sourced with pre or post-consumer waste materials.
ENVIRONMENTALLY BENIGN COATINGS
Coatings that have been TLMI EBA certified and break down into compounds in natural conditions that cause minimal harm to the environment. Paper with an environmentally benign coating can be safely landfilled without harm to the environment.

**Recommendation:** Acucote adhesive EF701 is certified TLMI EBA as environmentally benign.

COMPOSTABLE
Products can be safely landfilled and are certified by third party testing. Certified compostable products are tested for a period of 6 months to confirm there is a 90% breakdown in known environmental conditions (dirt and certain microorganisms). The test standards include ASTM D6400, ASTM 6868 and EN13432. Generally, third party testing is performed on the finished label so that inks and varnishes are included in the testing.

**Recommendation:** EarthFirst PLA, Acetate and Acetate UD facestocks are ASTM D6400 certified compostable. CP1 adhesive, when combined with certain facestocks, inks and packaging has been certified for composability by end users.

BIODEGRADABLE
Over time, these materials are able to break down by living organisms. Biodegradable products can be safely landfilled and can be certified to ASTM biodegradable standards that ensure the materials break down into common substances found in the soil. Materials can also be non-certified as they breakdown within a timeframe outside of the standard.

**Recommendation:** Acucote’s CP1 adhesive is made from biodegradable materials. CP1 has been tested by a third party and contains 98% biobased content. Acucote’s CP1 and EF701 adhesives and EarthFirst PLA, Acetate and Acetate UD facestocks are biodegradable. Paper facestocks are generally recognized as biodegradable.

**Coming Soon**
Ask about these additional solutions coming to the market from Acucote:

**WASH OFF ADHESIVES**
The adhesive allows the label to be easily separated from the container when exposed to water. The label is then thrown away and the container can be recycled in its designated waste stream without causing contamination.

**WATER DISSOLVABLE ADHESIVES AND FACESTOCKS**
A water dissolvable label breaks down the face and adhesive completely when exposed to water by disintegrating the label. As a result, it is a popular choice in food service labeling (materials dissolve in the dishwasher). This allows for clean separation of the facestock and adhesive from the container, which can then be reused or recycled in its designated waste stream.

**WATER BASED RELEASE COATINGS**
Silicone release coatings have been the primary ingredient for pressure-sensitive release liners. Non-silicone content release coatings are in the developmental stages. Non-silicone coatings can be more easily recycled versus silicone-based systems because silicone is disruptive to recycling processes. The non-silicone liner uses polymers that are different from standard silicone liner.

*Typically, these solutions are reviewed by our Application Development Team. These products are not always compatible with specific end uses.*

See suggested questions for your converters sustainability initiatives on page 4
ASK YOUR CUSTOMER
As with any new label application, understanding your customer’s sustainable goals are critical to providing the most appropriate solution. In order that the Acucote Applications Team can suggest sustainable labeling alternatives we need to understand your customer’s recyclable pathway and sustainability initiatives. Here are the type of questions you should consider:

- What is the container being labeled?
- How will the packaging be disposed of?
- Is recycled content enough?
- Will an FSC label suffice?
- Does the label have to biodegrade in 6 months?

Summary
Acucote has built its reputation around solving application challenges. Our team stands ready to help you navigate the rough waters of these challenging product recommendations and help you become “Sustainably Savvy.” If we don’t have the right product combination, we’ll quickly develop and source it for you.

For more information on our Sustainable Product Line visit: https://www.acucote.com/pressure-sensitive-products/sustainable-products/

EarthFirst is a registered trademark of Plastic Suppliers, Inc.