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WORLDWIDE



*Sustainability Guide*

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# A&H Sustainability Commitment

## **Our Promise to Our Planet**

As the global leader in innovative product packaging for over 50 years, we are steadfast in our beliefs that protecting our environment is one of the single, most important facets of our business. We embrace the values that cultivate a more sustainable society. We believe that the environment we thrive from, should be cherished and protected for future generations. We are committed to ensuring that we do our part, both internally and externally, to protect our planet.

At A&H Worldwide, one of our top priorities is creating innovative products, processes and technologies which incorporate ecologically friendly materials and techniques, to assist our customers in achieving their own sustainability objectives. We offer many eco-friendly packaging solutions, including recyclable and recycled materials, as well as in depth package engineering solutions to enhance brand image and reputation. We offer our customers an online “paperless” re-ordering system and work closely with brand owners and managers to incorporate sustainable solutions in current and future package design.

## **A&H Sustainability Initiatives**

Energy conservation is one area that we take seriously with regard to sustainability. We use energy efficient LED lighting throughout our building. We use Smart switches throughout our office that automatically turn lighting off when an area is vacant, to ensure energy resources aren't being wasted. In addition, our HVAC system also utilizes Smart technology. Our building is temperature controlled based on the outdoor temperatures at all times. This helps to eliminate waste and unnecessary energy consumption. We use FSC Certified paper throughout our office areas and recycle paper and plastics at all times. We encourage the use of re-usable water and coffee cups and other products when feasible.

## **Product/Material Sustainability**

A&H Worldwide offers many alternative sustainable materials to meet our customer's needs including recyclable and recycled plastics, water based, non-toxic inks, etc. We also offer various types of green packaging. We offer innovative designs that reduce material requirements through package re-engineering and work with the most environmentally sound options available today. In addition, A&H takes every opportunity to recycle and re-use recyclable plastic materials. Whenever possible, A&H sources materials from companies that share our commitment to sustainability.

## **Certifications**

A&H Worldwide is ISO 9001:2015, FSC, GMI, CONEG, Sedex and RCS Certified.

# Doing Our Part...

Plastics make an immense contribution to environmental sustainability through their energy saving potential and intrinsic recyclability and energy recovery options, but we all need to take sustainability, recycling, reusing and repurposing much more seriously.

## **Plastics and Environmental Sustainability**

Plastics have a very good environmental profile. Only 4% of the world's oil production is used for plastics and much less energy is used to produce it compared to other materials.

## **Packaging**

- Plastics provide unparalleled benefits as a packaging material. This is because plastics are lightweight, resource efficient and offer excellent barrier properties. Due to these properties, packaging items in plastics significantly reduces waste and saves energy.
- Plastics packaging is lightweight and resource efficient.
- If plastics were not used in packaging and other materials were used instead, then waste and energy consumption would double, and weight and costs would quadruple.

While plastic sometimes gets a bad rap, it is actually one of the most sustainable materials available today, in terms of usage. Plastics help us to do more with less in many ways. When it comes to packaging, plastics often enable manufacturers to ship more product with less packaging material. This process of light-weighting can play an important role in boosting the environmental and economic efficiency of consumer product packaging.





# Doing Our Part...

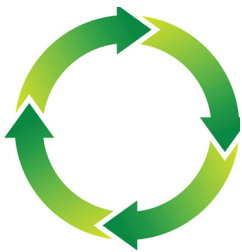
## Consider these examples:

### Reduce:

- Just two pounds of plastic can deliver 1,000 ounces—roughly eight gallons—of a beverage. Three pounds of aluminum, eight pounds of steel or 27 pounds of glass would be needed to deliver the same amount.
- Plastic containers can also use about 38% less material than similarly sized steel cans. Extremely lightweight, flexible packaging made from plastic or plastic-and-foil composites can use up to 80% less material than traditional bag-in-box packages.
- Continuously improving through innovation. Plastics are consistently re-engineered to become lighter and more efficient. Today's two-liter plastic beverage bottle and one-gallon milk jug weigh approximately 33 percent less than they did in the 1970s.
- Reducing transportation energy. Lighter packaging can mean lighter loads and fewer trucks and railcars are needed to ship the same amount of product, helping to reduce transportation energy, decrease emissions and lower shipping costs.
- Trimming waste. Weight-reduced packaging also helps to reduce the amount of waste generated or the amount of a material that needs to be recycled after a package is used.



**REDUCE**



**REUSE**

### Reuse:

- Plastic's durability makes it a preferred material for reusable items such as storage bins, sealable food containers and refillable sports bottles. In industrial shipping, plastic pallets are impervious to moisture and most chemicals, so they can be used over and over. In addition to conserving raw materials, choosing reusable items, where appropriate, helps to offset trash disposal costs and reduce the amount of waste sent to landfills.

### Recycle:

- Since the early days of plastics recycling in the 1970s, the nation's recycling infrastructure has grown significantly. In fact, the pounds of post-consumer plastic packaging collected and recycled has grown every year since 1990. Today, nearly every US household has access to plastic recycling programs.
- Although bottles remain one of the most readily recycled plastics, a growing number of communities are collecting and recycling other rigid plastic containers, such as tubs, trays and lids.
- Through these programs, plastics are collected, processed for recycling and used to create second-generation products ranging from fleece jackets and detergent containers to carpeting and composite lumber for outdoor decking.

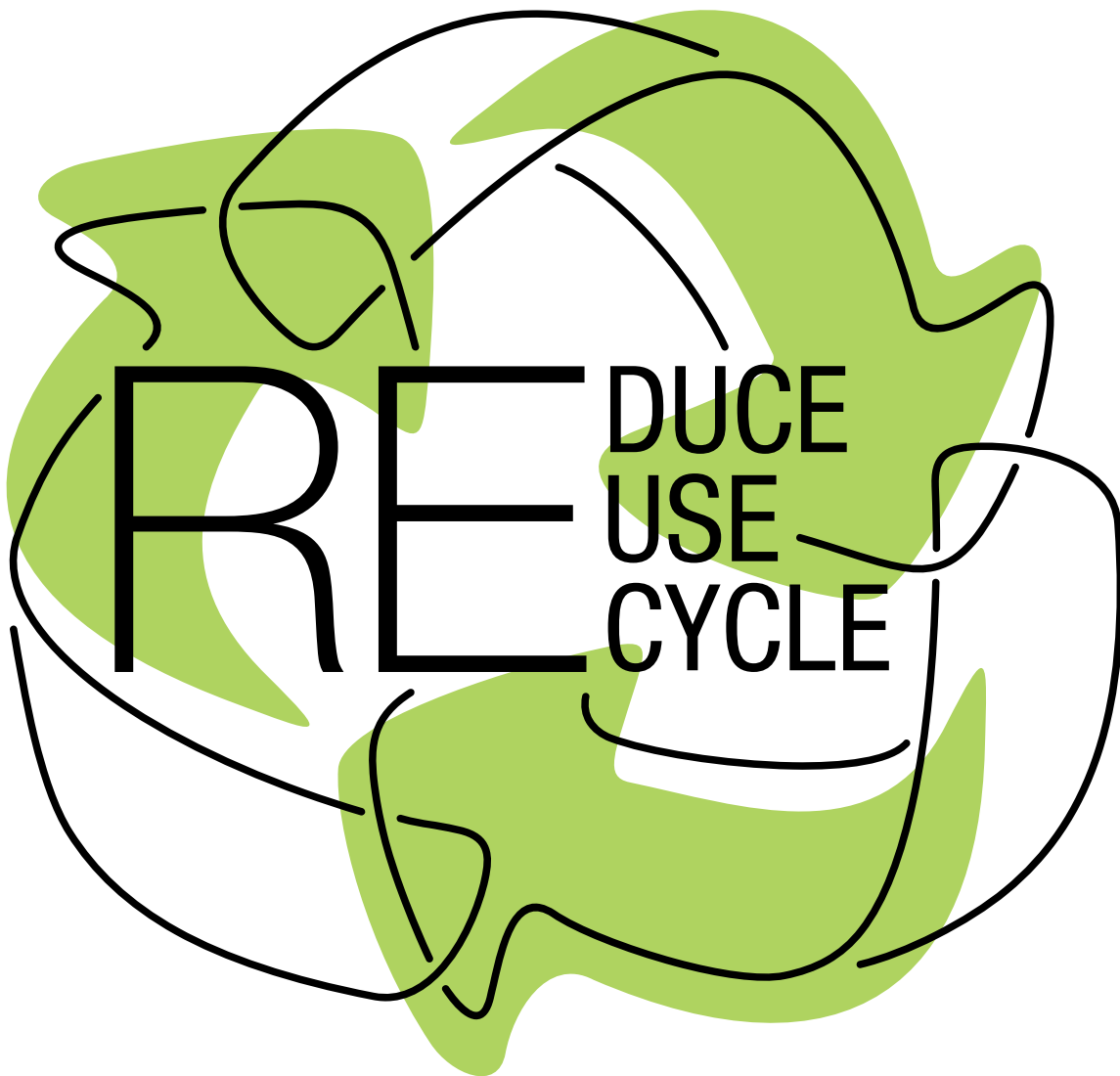


**RECYCLE**

# Doing Our Part...

Environmental sustainability has become a critical issue in the US and throughout the world. While plastics and other improperly recycled materials can be sources of pollution, the materials are not the bigger problem. The root cause of the problem is the lack of proper recycling and handling throughout the world. Stricter recycling guidelines and handling practices could significantly reduce the amount of waste filling our waterways.

At A&H Worldwide, we fully recognize this global problem and work diligently everyday to do our part to preserve our planet. Nearly every item we manufacture is made with recyclable plastic or paper, both in the US and in our China facility.



# 100% Recycled Plastic Is A Game Changer

What if we told you that you could reduce your carbon footprint with just one simple change? Would that prompt you to consider a more sustainable solution to your product packaging?

Today, after decades of extensive research and analysis of many different types of plastics and their effects on our environment, A&H Worldwide is pleased to finally offer up to 100% recycled plastic. We have taken this already recycled PET/PETG polyester plastic and given it a second purpose by turning it into packaging that can be recycled again and again.

- 100% Recycled Polyester Plastic
- High Quality
- Manufactured in USA
- Recyclable Again and Again
- No Color Restrictions
- Looks, Feels and Performs Exactly the Same as Vinyl and other plastic
- 100% Recycled and Chasing Arrows Symbol available if desired



Our 100% recycled plastic is the future in eco-conscious product packaging. As strong and as durable as many other types of plastic, this “green” friendly packaging solution, along with our proprietary processes, produces top quality product packaging every time.



# What Do All The Numbers Mean?

It's important to note that the type of plastic that is selected for each item we manufacture, depends on the item itself, cost, availability and geographic location. For example, PETG/Polyester is readily available in the US and therefore, costs less than to manufacture this type of plastic in China. Likewise, PVC is more readily available in China and therefore, costs less to manufacture in that location. The cost/benefit of taking the geographic location and availability of the different types of plastics into consideration can be significant. As plastic packaging experts, we analyze the usage of each individual product and then select the appropriate type of plastic.

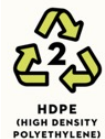
Plastic items can be labeled with a number and the universal chasing arrows recycling logo around it. This indicates more specifically, the elements of each type of plastic. This number is called a resin identification number, or RIN. The resin identification numbers run from 1 to 7. This number indicates what type of resin the plastic is made of. With all the different rules and symbols, it can be confusing for consumers to figure out exactly what each recycling symbol means and how to recycle it. While the universal plastic resin symbol (three chasing arrows forming a triangle) remains the same, the numbers one through seven inside, make a significant difference. Below is information on each type of plastic and some of the uses of them at A&H.

## Plastic Options:



### **PETE or PETG** (Polyethylene Terephthalate/Polyester)

Earring cards, fold-overs and many of the items made here in the US are made from this type of plastic.



### **HDPE** (High Density Polyethylene) is a versatile plastic with many uses.

Earring cards and some molded security items are made from this type of plastic.



**PVC (Polyvinyl Chloride) and V (more commonly referred to as "vinyl")** are essentially the same material. Some earring cards and puff pads are made from this type of plastic.



**LDPE (Low Density Polyethylene)** is a flexible plastic with many applications. This is used for belt hangers and other molded items.



**PP (Polypropylene)** - This plastic has a lower density and is typically used in injection molded items. It is not as stiff as PVC. This type of plastic is used for belt hangers and other molded items. More recently, it has been used for some earring cards.



**PS (Polystyrene/Styrofoam)** - This is typically used in injection molded items.



A wide variety of plastic resins that don't fit into the previous categories are lumped into this one. Polycarbonate is number seven plastic.



**20 PAP** - Paper, cardboard, cards, boxes, etc...



# Paper/Cardboard

At A&H, paper and cardboard are used in many packaging products that we manufacture including boxes, cards, accessory hangers and more. These paper/board products are recyclable and are a great option for many of our customers.

While not all product packaging can be manufactured with paper/board (depending on the end use of the packaging), this is a great option for many of our “sustainable” customers.

Paper is one of the most widely recycled materials in the world.

Paper’s positive economic and environmental impacts on the circular economy are critical to creating a sustainable future. Recycled paper and cardboard become more of the same once they are recycled and processed.

- 68.1% of paper consumed in the United States was recovered for recycling in 2018.
- 18 Million Metric Tons of CO2 emissions are avoided through recycling paper by American Forest & Paper Association member companies.
- \$8.1 Billion worth of recycled paper was collected, sorted and processed by the paper recycling industry in 2017
- 3.3 Cubic Yards of landfill space is saved for every ton of paper collected.
- Approx. 80% of Papermakers in the U.S. use recycled paper
- Top 10 Employer - The paper industry is among top 10 manufacturing sector employees in 45 states



FSC is an independent, non-profit organization that protects forests for future generations. The Forest Stewardship Council sets standards for responsible forest management. FSC harnesses market demand, to ensure forests are responsibly managed. Today, more than 380 million acres of forest are certified under FSC’s system, including more than 150 million acres in the US and Canada.



20 PAP – cardboard, cards, boxes, etc...

# Forest Stewardship Council (FSC) Certification

FSC has its roots in certifying that wood shipped from South America is not being illegally harvested from the rain forest.

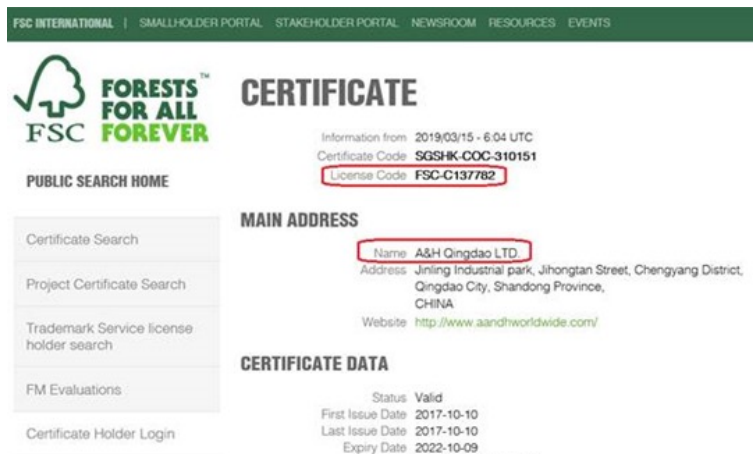
This has since grown to encompass all wood and wood products, (including paper) to review the “cradle to grave” process for sustainability and best practices.

To become FSC certified requires the build-out of document control for every step of manufacturing, from receipt of raw materials, to shipping of finished goods. An onsite management representative must be present at all times and there must be a training plan for employees involved in sourcing, manufacturing, shipping, and accounting to ensure all requirements are met.

Our Chain of Custody certification (COC), allows us to process FSC material. Certification is for a five year period, with annual onsite audits that we must pay for. Documentation of raw materials, finished goods, and scrap are required. A separate warehouse must be established as a holding area, designated for FSC material only. Calculations needs to be done to confirm FSC raw materials match finished goods shipped, and the paper trail must ship with finished goods. All FSC raw material suppliers must be reviewed to ensure they are authorized.

The number of FSC certified papers and boards is limited, when compared to the world market. This may limit material selections and the MOQ on materials may be higher, as the brokers we typically buy paper and board from do not want to hold inventory on what are typically high-priced raw materials. We anticipate a similar commitment from OUR customer would be required, depending on our exposure.

Our records must be maintained for five years, including raw materials, sales, production, employee records, and total plant production.



The screenshot shows the FSC International Public Search Home page. The header includes navigation links: FSC INTERNATIONAL, SMALLHOLDER PORTAL, STAKEHOLDER PORTAL, NEWSROOM, RESOURCES, and EVENTS. The main content area is titled "CERTIFICATE" and displays the following information:

- Information from: 2019/03/15 - 6:04 UTC
- Certificate Code: **SGSHK-COC-310151**
- License Code: **FSC-C137782**

Under the "PUBLIC SEARCH HOME" section, there are links for:

- Certificate Search
- Project Certificate Search
- Trademark Service license holder search
- FM Evaluations
- Certificate Holder Login

The "MAIN ADDRESS" section lists:

- Name: **A&H Qingdao LTD**
- Address: Jining Industrial park, Jihongtan Street, Chengyang District, Qingdao City, Shandong Province, CHINA
- Website: <http://www.aandworldwide.com/>

The "CERTIFICATE DATA" section shows:

- Status: Valid
- First Issue Date: 2017-10-10
- Last Issue Date: 2017-10-10
- Expiry Date: 2022-10-09
- Standard: FSC-STD-40-004 V3-0





*Frequently Asked Questions*

# Frequently Asked Questions

## **A few things to understand from a packaging perspective:**

1. Most all types of plastic that are used in our product packaging are recyclable or recycled to some extent. The level of sustainability is dependent on the type and usage of the specific packaging and the material used.
2. It's important to note that not all plastics can be used for all items. Some types are softer and more pliable, some are harder and more durable.

## **Common Questions:**

### **1. I need to have an earring card/puff pad manufactured, however, I am not sure what type of plastic my existing item is made from?**

o We are happy to help. If you could send us 4-6 sample pieces, our engineering team can analyze the samples to determine the material used and any color requirements you may need. We can then provide you with the specific information for your item and possibly offer cost effective alternative recommendations as well.

### **2. How does A&H determine the type of plastic that should be used for my item?**

o As the global leader in plastic packaging, A&H has a full, in-house engineering team that will consider all factors when determining what type of plastic should be used. Some of these factors include the usage of the item, color of the item and availability of plastic type based on the geography of where the item will be used/shipped.

- It's important to note that not all plastics can be used for all items. Some types are softer and more pliable, some are harder and more durable. This is why it is important to fully understand what our customer's item will be used for, as this helps determine the type of plastic that will be suitable.



# Frequently Asked Questions

### 3. Why are some plastic items manufactured in the US and some in China?

o The location of where an item is manufactured depends on many factors. The type of material the item will be manufactured from is critical in determining the most efficient location due to material and supplier availability. PETG/Polyester for example, is very readily available and cost efficient in the US, therefore, if a packaging item can be manufactured from this material, we will use our US facility. PVC on the other hand, is very readily available in China. This allows for bigger cost efficiencies and an abundance of this type of material and therefore, is more feasible to manufacture items made from PVC in that location. Another reason for where packaging is manufactured is based on where the product will be packaged.

### 4. Does A&H offer sustainable material options? Can my card, box, hanger be made with a sustainable material?

- o Yes. A&H offers many recyclable and recycled materials.
  - We would be more than happy to provide you with sustainable options for your packaging. Your specific card, box, hanger and its purpose help us decide which type of material to use.
  - Package re-engineering or right sizing your package is a great alternative as well. This involves re-engineering your packaging so that your product fits precisely and there is no wasted space or materials.
  - Creating a re-usable package or box is a great way to contribute to a sustainable future.
  - Our plastic earring cards all contain a percentage of recycled content. The actual content varies based on the availability of scrap in a color that will blend well.
  - Products like watch boxes are typically made from 100% recycled plastic. This is possible as there is no color standard required with a box that is fully wrapped in paper.
  - Paper board boxes are similar, as the exposed parts of a box are covered with paper, allowing the chip board used for the strength of the box to be made from 100% recycled content.
  - Belt hangers typically contain approximately 25% recycled plastic, but this is based on the final color and the desired strength, as excess scrap plastic content can lower the strength of a plastic item.
  - Earring cards- up to 100% recycled plastic.

# Frequently Asked Questions

## 5. Does A&H offer a biodegradable plastic additive that enhances the ability for the plastic product to decompose?

- A&H Worldwide has followed and researched plastics additives for well over 15 years, including starch-based plastics and various Oxy-Bio additives. To date, none of them have proven to be a viable solution that we are willing to offer. There are currently NO reputable plastics industry organizations that will verify or certify the 100% biodegradability of plastics additives.
- The starch-based options tended to be brittle and deform in high humidity. This material also failed in forming consistent hangers. The surface texture was unsuitable for many printing operations as well.
- In the case of plastics additives, there are several issues. First, the recycling industry has concerns that wide spread use may have a negative impact on the recycling market, compromising the strength in a product that must have a long life. With regard to card packaging, the ultimate resting place is either a recycling operation with the associated contamination concern if recycled, or a landfill. Landfills are capped to eliminate a moisture migration and have no sunlight, oxygen or composting, which are the conditions necessary for additives to be effective in breaking down plastic. In addition, the ASTM standards are very clear on the degree of degradation that must occur over very specific time constraints, to allow an item to be labeled biodegradable.
- The Plastics Industry Association/Bioplastics Division, a highly regarded industry organization that has spent many years experimenting with plastics additives, offered the following statement with regard to “biodegradable” additives:

### Conclusion

- The position of the PLASTICS INDUSTRY ASSOCIATION-Bioplastics Division is that any claim, especially claims for consumers, needs to be supported by third-party vetted scientific evidence based on well-established standard specifications. In the case of “degradable additives” the problem is one of claiming “biodegradation” where there is no evidence to support those claims or prove biodegradability as per accepted, third-party vetted specifications. Allowing the brand owner, retailer or ultimately the consumer to decide what they consider a “biodegradable” product to be is risky, as this would lead to varying definitions that would only lead to greater consumer confusion.
- A&H Worldwide continues to review all viable alternatives and hopes at some point, to bring a product offering to market that can meet the necessary ASTM standards. We are currently ISO 9001:2015, FSC, GMI, CONEG and Sedex Certified and we are currently in the process of obtaining our RCS Certification. A&H Worldwide is the trusted leader when it comes to cutting edge research and development, offering numerous eco-friendly packaging options, as well as decades of knowledge and experience with sustainable materials.

# Frequently Asked Questions

**6. Is my card, box, hanger recyclable and if so, can A&H stamp the recycle code on the back?**

o A&H can add the appropriate recycle code to your item depending on the material used. If your card, box, hanger, etc...is not recyclable, we can look at other options and accommodate your request.

**7. Does A&H use FSC certified paper for all of their paper/cardboard processes?**

o We offer FSC paper whenever possible.

- Not all forms of paper are FSC certified. This strictly depends on what paper type is required for your item and on what material it is being applied. Not all materials are available in an FSC version.
- As the number of FSC products continue to increase, FSC products are still somewhat limited with longer lead times.

**8. Is A&H FSC Certified – Is my product manufactured with FSC certified paper?**

o Our facility in Qingdao is FSC Certified, where much of our paper sourcing is done and we adhere to the strict guidelines of the Forestry Stewardship Council.



# Frequently Asked Questions

**9. Does A&H use recycled or recyclable plastics?**

o Yes. A&H uses recycled plastic whenever possible. We have the capacity in-house to re-grind and re-use much of the plastic we use for our customers products. Most all of the plastic we use is recyclable.

**10. Are your plastic suppliers certified in any way with regard to sustainability?**

o Yes. Our plastics suppliers take sustainability very seriously and share our commitment to our planet. Many are ISO Certified and hold several other sustainability certifications.

**11. Does A&H require their plastic suppliers to have any requirements for sourcing plastics?**

o A&H requires all of our vendors to share in our commitment to sustainability and protecting our planet. We scrutinize all of our vendors to ensure they take every measure possible to do their part.





# Frequently Asked Questions

## 12. What type of inks does A&H use? Are they environmentally friendly? Do they cost more?

o A&H uses only soy and water-based inks that are free of heavy metals and toxins and are environmentally friendly.

- The ink vendors that we work with are all compliant with CONEG and other heavy metals restrictions. These requirements are always mandated from our vendors.
- Inks are developed for very specific types of printing and are very dependent on what material we are printing on. For example, during the product development stage, we first look at what material is best suited for the specific item. Once that is determined, we then look at which material will perform best for the use of the package - paper or board or plastic. Next, we look at the artwork. During this phase, we determine what the desired look is for the packaging. Once we determine that, it's time to select a printing process and the ink that will be used. Questions we need to answer include: what material are we printing on, do we need to include light fast for outdoor UV, temperature range requirements, wash/laundry standards, smudge resistant, spot color, process color or PMS match needed? All of these questions must be answered in order to determine which ink we can use for any specific item.
- For a more cost effective solution, consider the number of ink colors used per item, more colors will cost more. This will help to reduce the cost and the overall carbon footprint of the package.
- A&H will also offer suggestions on how to cut costs with suggested changes in art or the actual package engineering.

# Frequently Asked Questions

## 13. Does A&H have a sustainability initiative? If so, what is it?

### **Our Promise to Our Planet**

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Energy conservation is one area that we take seriously with regard to sustainability. We use energy efficient LED lighting throughout our building. We use Smart switches throughout our office and factory areas. In addition, our HVAC system also utilizes Smart technology. Our building is temperature controlled based on the outdoor temperatures at all times. This helps to eliminate waste and unnecessary energy consumption. We use FSC Certified paper throughout our office areas and recycle paper and plastics at all times. We encourage the use of re-usable water and coffee cups and other products when feasible. We regularly reach out to our customers with our latest recyclable/recycled offerings and encourage their use whenever possible.

### **Product/Material Sustainability**

A&H Worldwide offers many alternative sustainable materials to meet our customer’s needs including recyclable and recycled plastics, water based, non-toxic inks, etc. We also offer various types of green packaging. We offer innovative designs that reduce material requirements through package reengineering and work with the most environmentally sound options available today. In addition, A&H takes every opportunity to recycle, re-grind and re-use recyclable plastic materials and waste. Whenever possible, A&H Worldwide sources materials from companies that share our commitment to sustainability



## Forest Stewardship Council FSC Certificate - A&H Qingdao

The Forest Stewardship Council (FSC) sets standards for responsible forest management. A voluntary program, FSC uses the power of the marketplace to protect forests for future generations. FSC is the gold standard in forest certification and is the only system supported by groups such as WWF, Sierra Club, Greenpeace, Natural Resources Defense Council and the National Wildlife Federation.

**A&H Manufacturing Qingdao** is proud to be a recognized member of FSC since 2017. We are an approved and certified packaging producer.

**Registration # - SGSHK-COC-310151**  
**Expiration - October, 2022**





## RCS (Recycled Claim Standard) Certified

A&H Worldwide is proud to announce that we are **RCS Certified**.

The **RCS** (Recycled Claim Standard) is used as a chain of custody standard to track recycled raw materials through the supply chain. The standard was developed through work done by the Materials Traceability Working Group, part of OIA's Sustainability Working Group. The RCS uses the chain of custody requirements of the Content Claim Standard.

The RCS verifies the presence and amount of recycled material in a final product. It allows for the transparent, consistent and comprehensive independent evaluation and verification of recycled material content claims on products. RCS can be used as a business-to-business tool to give companies the means to ensure that they are selling quality products and getting what they pay for. It is also used to ensure accurate and honest communication with consumers.

The (RCS) Recycled Claim Standard is an international, voluntary standard that sets requirements for third-party certification of recycled input and chain of custody. The goal of the standard is to increase the use of recycled materials.

## Other Certifications

A&H is qualified with both **ISO 9001:2015** certification and **GMI** certification, which ensures compliance with the highest of international standards for quality control, as well as meeting global requirements for social responsibility. Our Qingdao facility is also **FSC** Certified. A&H Worldwide also certifies that all of our packaging meets **CONEG** Heavy Metals Regulations, as well as the State of California Proposition 65 packaging requirements.

A&H Worldwide is Sedex Certified and is consistently in full compliance with delivering improvements in responsible and ethical business practices in all of our wholly owned operations, worldwide.

