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For Immediate Release



## **Study Finds Amount of Aluminum Contained in Decorative Foils is Negligible**

*FSEA Asserts Decorative Foils are Not a Hindrance to Recyclability or Sustainability Goals*

Topeka, Kansas -- The Foil & Specialty Effects Association (FSEA) and its Sustainability Committee have worked with FSEA-member foil manufacturers to determine the amount of aluminum that is used in the manufacturing of transfer foils, including hot, cold and digital transfer foil products. Through this investigation, FSEA has compiled data confirming the layer of aluminum that provides the metallic sheen in a metallic transfer foil is negligible – in fact, it is so thin that it is measured in nanometers, which is 1/10<sup>th</sup> of an angstrom. “We believe it is important that those involved in the repulping and recycling processes understand the unbelievably small amount of aluminum that is contained in decorative transfer foils,” stated Jeff Peterson, FSEA Executive Director.

Brands choose foil because of its high-visibility enhancement properties. Research has shown that packaging decorated with foil rates more than 80% higher than non-foil packaging in quality, appeal, value and brand awareness<sup>1</sup>. Foiled packaging also attracts attention faster (44%) and retains attention longer (16%) than identical packages without foil<sup>2</sup>.

The thickness of the aluminum layer in a transfer foil – which is a layer of aluminum that is vacuum metallized to a film carrier – has been found to be between 30 and 60 nanometers in thickness. For comparison purposes, a sheet of copy paper is approximately 100,000 nanometers thick, and a human hair is approximately 80,000 to 100,000 nanometers thick. The thickness of the aluminum layer in transfer foils is more than 300 times thinner than a standard household aluminum foil.

To further demonstrate the negligible amount of aluminum in transfer foils, one large roll of decorative foil (40” x 35,000’), if unrolled, would cover nearly 2 ½ football fields. This one roll can be used to decorate as many as 120,000 cosmetic cartons containing 5% to 100% foil coverage. The actual amount of aluminum in this jumbo roll of foil would weigh barely more than one ounce, or less than .75 cubic inches in mass (about the size of the tip of a typical human thumb).

“Through investigation and communication with FSEA-member foil manufacturers, the FSEA and its Sustainability Committee have been able to provide specific information that can help brand owners, recyclers and others involved in the decision to foil-decorate cartons, direct mail or other printed products understand the miniscule amount of metal that is involved in hot, cold and digital transfer foil manufacturing,” explained Peterson. “Our goal as an association is to continue to educate those involved with decorative foils about the

facts and to dispel myths by using studies the FSEA has commissioned – along with additional supporting findings such as this – to demonstrate that foil decorated paper/board is repulpable and recyclable.”

For further information, contact FSEA at 785.271.5816 or email [jeff@fsea.com](mailto:jeff@fsea.com).

*The Foil & Specialty Effects Association (FSEA) provides a wide range of resources to help companies remain profitable today and into the future. From cost-saving programs and educational opportunities to green initiatives proving the sustainability of foil decorated paper/board, the FSEA strives to provide its members with ideas, resources and solutions to grow in today's marketplace. For more information, visit [www.fsea.com](http://www.fsea.com).*

### **References**

1. Perception Research Services. *Foil Stamping Strengthens Brand Identity*. 2004.
2. Foil & Specialty Effects Association (FSEA). *An Initial Study into the Impact of High-Visibility Enhancements on Shelf Presence*. 2014.