

# CelloVet™

BE CERTAIN IT'S CELLOPHANE

WWW.CELLOVET.COM

## What is Cellophane?

Cellophane was first created in the early 1900's. It is made by extruding regenerated cellulose from plant materials into a thin film.

Initially popular for wrapping baskets, flowers and food products, real Cellophane fell out of favor in the past 40 years to be usurped by plastics. What happened during this time, is that the term "Cellophane" became genericized much like Kleenex did for facial tissues, and plastics replaced the cellulose based films previously marketed as Cellophane.

In veterinary surgery, thin cellulose based films are utilized to attenuate portosystemic shunts in dogs and cats. They may be used instead of ameroid ring constrictors in very small patients for which the smallest ring size is too large, or around complex shunts and in hard to reach places. Real Cellophane should stimulate a fibrous perivascular reaction and slowly occlude the shunt, whereas plastic films such as polypropylene are often inert and will not attenuate a shunt.

## What is CelloVet™ Cellophane?

Before CelloVet™, sourcing Cellophane for use in veterinary surgery was haphazard. Veterinary surgeons were known to buy cigarettes, flowers or greeting cards in the hopes that the packaging they were supplied in was real Cellophane.

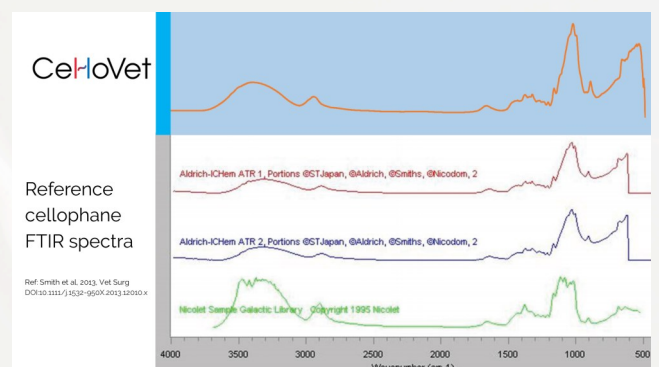
As Smith (Veterinary Surgery, 2013) has shown, it is very unlikely that the material peddled as Cellophane in your local store is cellulose based, but more likely a plastic such as polyolefin. Moreover, even if you stumble across what may be a cellulose based film, 99.9% of the time it will have some sort of plastic or adhesive coating to improve its material properties, handling and shelf life.

CelloVet™ provides you with a reliable source of 'real' Cellophane made from pure regenerated cellulose for use in veterinary shunt surgery. No adhesives. No plastics. No impurities.

## Why use CelloVet™ Cellophane?

A recent study by Smith et al in Veterinary Surgery 2013 showed that only one of 4 products marketed as Cellophane and potentially used in shunt attenuation surgery was truly extruded regenerated cellulose. All of the rest of the products were plastics.

To provide veterinary surgeons with a consistent, reliable source of real cellulose based Cellophane, we wanted to ensure our products stood up to rigorous scientific testing, so we submitted our Cellophane for Fourier Transform Infrared Spectroscopy - the same technique used by Smith et al for analysis at Purdue University's material science division.



As you can see above, the orange spectrum absorbance peaks representing CelloVet™ are consistent with the peaks found in the reference libraries for Cellophane reported in Smith's paper from Veterinary Surgery in 2013.

***"With CelloVet™ you can be certain that it's Cellophane."***

**- Tim Preston**

*Small Animal Specialist Surgeon, founder and CEO*

## CelloVet™ cellophane vs ameroids

### 1. Shunt location.

Depending on whether the shunt is intra or extra-hepatic cellophane or ameroids may be better depending on the ease of access. Ameroids are probably most appropriate for easily accessible areas, whereas cellophane has the ameroid beat for its flexibility, light weight, thinness and ability to be smoothly passed around shunts in hard to reach places including around intra-hepatic locations.

### 2. Shunt size.

Cellophane supplied by CelloVet™ is cut to a size that should be appropriate to encompass the smallest to largest of congenital portosystemic shunts. Ameroids on the other hand cannot be used on either shunts that are smaller than 3.5 mm or larger than 9 mm without ordering custom made rings from the manufacturer. Reduce stock with CelloVet™ - one size fits all.

### 3. Bulk.

Ameroids are heavy and bulky. It is often difficult to pass even the smallest ring around some shunts without a lot of finesse and skill. In small breeds susceptible to congenital portosystemic shunts, the sheer size and heft of the ameroid around the shunt may pull on the shunting vessel, raising the risk of early attenuation, portal hypertension and acquired shunts.

### 4. Costs.

Ameroid rings are expensive. The 3.5 mm internal diameter is the smallest ring available commercially and costs \$65USD. Stocking an ameroid ring of each size (8 total) costs ~\$550 USD. By choosing CelloVet™, you save money and reduce stock, whilst still being capable of treating a variety of size and shunt types.

### 5. Sterilization.

Ameroids are unable to be autoclaved. This means expensive and potentially dangerous EtO, gas plasma or gamma irradiation. In contrast, CelloVet™ is supplied non-sterile and can be sterilized in an autoclave on an 'as needed' basis for each case. All you need to do is supply the single-use sterilization pouches.

### 6. Ease of application.

Cellophane is pliable and flexible, making it easy to maneuver in tight locations around the shunt. This helps to reduce the risk of vessel laceration when attempting to apply a bulky ameroid. Moreover, CelloVet™ cellophane avoids the hassle associated with placing or misplacing the ameroid ring's "key". All you need is 4 metallic hemostatic clips to secure the cellophane around the shunt.

### 7. Flexibility.

CelloVet™ provides you with a product that is flexible in its application. As the surgeon, you can cut it to your desired size; you can fold it and you can attenuate the shunt at your discretion (if you're measuring portal pressures) using the cellophane before clipping it in place.

### 8. Follow up.

Because you use metallic or plastic polymer hemostatic clips to secure the cellophane in place, this provides you with a radiographic or sonographic land mark for case follow up.