

# Contact Bedding Overview

The importance of animal bedding is often overlooked. Yet small animals are in close or immediate contact with bedding on a continuous basis. Given that small animals are often confined to relatively small spaces with limited ventilation, bedding is another potential research variable with significant implications for research results or health issues. Harlan Laboratories understands the importance of high quality bedding and knows that not one type of bedding is appropriate for all applications. That is why Harlan Teklad offers a full range of high quality bedding products to research institutions around the globe, some of which Harlan Teklad manufactures themselves. Harlan Teklad offers contact bedding for small animals such as mice, rats, hamsters, chinchillas, degu and guinea pigs as well as for larger animals such as dogs, rabbits, pigs, sheep and goats. Harlan Teklad also offers non-contact bedding products (custom-cut paper cage liners) that are higher in quality and more economical than most competing products. Harlan Teklad enrichment bedding combines excellent absorbency and odour control with environmental enrichment.

Harlan Teklad bedding products are manufactured according to our strict quality standards. Several are now manufactured by us too, in our new bedding plant in Wisconsin. Suppliers are audited biannually for compliance. Bedding products are tested routinely for microbiological and chemical contaminants. Many products have been tested and used by Harlan Laboratories animal barriers. Similar to our diets and enrichment products, we distribute bedding products through our network of company owned and operated distribution centers.

## 7084 Pelleted Paper

### ***7084 Harlan Teklad Pelleted Paper Bedding***

7084 Harlan Teklad Pelleted Paper Bedding is an environmentally friendly choice in laboratory animal bedding material. It is made primarily from pre-consumer recycled paper, mixed with some aspen hardwood sawdust as a pelleting aid, so it is very clean, highly absorbent, and non-toxic. Originally designed as a non-contact bedding and cat litter, pelleted paper has been increasingly used as a contact bedding with excellent results, particularly in superior absorbency and odour control. It also will not plug automated watering valves.

***Unlike most other pelleted paper bedding products, which are made up mostly of post-consumer recycled newspaper, Harlan Teklad 7084 Pelleted Paper Bedding is made from pre-consumer recycled paper, most of which was never printed upon. This is a very important distinction, because this product will not contain any bits of plastic, string, staples, high ink***

*content, or other contaminants that can be introduced in the post-consumer recycling process.* Pre-consumer paper is also never subjected to any chemical de-inking solvents. For the small percentage of raw material that we use that does have printing on it, only soy ink is used. The net result is a much safer, cleaner, and lighter coloured product that will not turn your white rodents grey!

To summarize some of the key benefits of 7084 Harlan Teklad Pelleted Paper Bedding:

- Environmentally Friendly
- Biodegradable and Incinerable
- Highly Absorbent
- Very Low Dust
- Non-Toxic (No post-consumer contaminants, chemicals or solvents)
- Excellent Odour Control
- Lighter Color

7084 Harlan Teklad Pelleted Paper Bedding is produced in a sanitary plant that is dedicated solely to the production of laboratory animal bedding products. This plant employs stringent quality assurance, housekeeping and sanitation procedures consistent with what the research community demands and expects.

7084 Harlan Teklad Pelleted Paper Bedding is packaged in 40-pound bags.

## **7089 Diamond Soft Bedding**

### ***7089 Harlan Teklad Diamond Soft Bedding***

**“Diamond-pure, yet soft as cotton ”**

Harlan Teklad 7089 Diamond Soft cellulose bedding material is a unique laboratory animal bedding, consisting of specially-processed bleached hardwood paper pulp. This type of paper pulp is used extensively as a cellulose source in the manufacturing of many types of consumer paper products. **As the product name indicates, this material is softer than any other contact bedding product currently on the market, allowing for the most comfortable environment possible for your valuable animals.** It is an excellent contact bedding material for all species of rodents, guinea pigs and small animals.

Product Features & Benefits

**SOFT** - Softest contact bedding material available, providing maximum animal comfort.

**NESTABILITY** - Animals nest and burrow in the material, providing excellent environmental enrichment. May help improve nesting and breeding performance.

**BRIGHT WHITE COLOUR** - Improved animal observations.

**HIGHLY ABSORBENT/CONTROLS AMMONIA** - Allows for reduced cage changes in many applications, and also requires less bedding per cage on a weight basis.

**BIOSECURITY** - This extremely clean material is produced in a plant that is dedicated to the production of laboratory animal bedding products, in which maximum levels of quality control and vermin control are employed.

**QUALITY CONTROL** - The non-certified 7089 is screened semi-annually for potential contaminants, making it a very highly defined material.

**TOXICOLOGY STUDIES** - The certified and irradiated version (7989C) is an excellent contact bedding choice for GLP toxicology studies, when alternatives to wire bottom cages are desired.

**EASE OF DISPOSAL** - Biodegradable, and can be easily incinerated.

- 7089 Diamond Soft is packaged in 20 pound autoclavable bags

## 7090 Sani-Chips

7090A Teklad Aspen Sani Chips

"Unparalleled Quality Control"

P.J. Murphy starts with only the most select hardwoods, which are debarked (nature's guard against bacteria and disease) before the logs are sawn. Large pieces are removed before loading materials onto P. J. Murphy's own trailers, via air conveying systems. Trailers are used solely for hauling hardwood bedding to guarantee no contamination of tars and resins. Pine bedding is refused because at all hardwood facilities, only hardwoods are processed, avoiding any contamination which is inherent in all softwoods. Once the material is shipped from the sawmill, it goes directly into an enclosed hopper. The wood is removed from the hopper via a metered, precision ground auger into initial screeners, which eliminate all coarse particles. From this point, the production system is completely closed. After the initial screening, all desired particles are dropped through a rotary air lock into a 3 phase, 75 foot pass, where they are rotary drum dried, with a maximum temperature of 1200°F, for 20 minutes. This reduces the moisture content to 8%, with a  $\pm 2\%$  variance and kills most harmful bacteria. Material is then conveyed, by air,

from the dryer to another set of sifters, screening to the final particle size. To further refine the product, P. J. Murphy has added additional, innovative, and unique equipment, enabling them to further increase their screening and aspirating efficiencies. Sani-Chip is a cube-cut type bedding, free of splinters, shavings, slivers, excessive dust, and all foreign matter. It is aspirated a final time and augered into a 2.2 cubic foot, 3-ply Kraft paper bag, which is autoclavable.

## Experience

Sani-Chips have been used by the National Institutes of Health in Bethesda, Maryland, National Center for Toxicological Research in Jefferson, Arkansas, National Toxicology Programs throughout the United States, many state and private universities, major pharmaceuticals, and many of the nation's finest breeders of laboratory animals.

# 7092/7097 Corncob

7092, 7097 Harlan Teklad Corn Cob Bedding  
Quality Control and Quality Assurance

## Raw Materials

The raw stock for our corncob bedding products is 100% corncob. No other components or additives are used. The 1/4" (**7097**) and 1/8" (**7092**) products are produced from only the woody-ring portion of the corn cob, and the pelleted corncob is produced from the pith and chaff (beeswing) portions.

## Processing Procedures

As the raw stock corncobs are introduced to the plant, they pass through a hammermill that produces corncob fractions. The corncob fractions are then heat-dried. The drying process utilizes a rotary dryer system that heats the corncob fractions to approximately 200° F for two to three minutes. An aspiration process separates the woody-ring portion of the corncob from the pith and chaff portions. Smaller fractions/particles are produced by rollermill and hammermill processes. The particles are then sized and separated through a sifting process which utilizes screens conforming to U.S. standards. The particles pass through a final aspiration process to remove any remaining dust and aspiration process to remove any remaining dust and are then placed in overhead storage until packaged. The pith and chaff portions are processed through a pellet mill to produce the pelleted corncob product. Plant operating procedures require a minimum testing frequency of twice per shift for measuring moisture content and particle size distribution.

## Packaging

- 7092 1/8" Corn Cobs, 40 lbs.
- 7097 1/4" Corn Cobs, 40 lbs.

## **7093 Shredded Aspen**

### ***7093 Harlan Teklad Shredded Aspen Bedding***

**7093 Harlan Teklad Shredded Aspen Bedding** is made from 100% Great Lakes Aspen wood. It makes an excellent contact bedding for rats, mice, hamsters, gerbils and guinea pigs. 7093 Shredded Aspen is not a by-product of some other manufacturing process. It is manufactured from pure aspen wood, specifically for use as a contact bedding, from aged virgin timber.

7093 Shredded Aspen is a natural hardwood material, so it is a preferred alternative to softwood bedding materials such as pine. Also, unlike traditional hardwood chips, the random particle sizes of shredded aspen material give animals the ability to construct nests and burrows. This makes 7093 Shredded Aspen a good choice for use with breeding animals. In fact, 7093 Shredded Aspen is the bedding material that is most widely used in Harlan Laboratories animal production barriers.

During production of 7093 Shredded Aspen, the product is exposed to temperatures of 1200 degrees Fahrenheit for several minutes. These conditions reduce the moisture content of the finished product to approximately 8%, and reduce harmful bacteria and other micro organisms. Laboratory analysis of the finished product is performed quarterly, and provides information on potential contaminants such as pesticides, heavy metals, yeast and moulds. The QC test results are available upon request.

#### **Packaging:**

7093 Teklad Shredded Aspen is packaged in compressed 4.38 cubic foot autoclavable paper bales, each weighing 35 pounds, which expand to approximately 9 cubic feet when opened.