

Weekly Newsletter
from Agresource Inc.
for turning waste into
opportunity

Bottom Line

You can compost jeans only if they are 100% cotton, untreated, and properly prepared. Most modern stretch denim does not meet this standard.

Before composting, consider reuse, repair, or textile recycling. Composting should be reserved for materials that are truly biodegradable and will not introduce contamination into a finished soil product.

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"The environment is where we all meet; where we all have a mutual interest; it is the one thing all of us share." — Lady Bird Johnson

Fashion Alert – Composting Jeans

Denim is durable, long-lasting, and one of the most common textiles in closets—and in the waste stream. But can jeans be composted? The answer depends entirely on what they're made of.

When Jeans *Can* Be Composted

Jeans made from 100% cotton can biodegrade in an active compost system.

Cotton is a natural plant fiber composed of cellulose. In a properly managed aerobic compost pile, such as a windrow or static aerated pile, microorganisms can break cotton down over time. However, denim is thick and tightly woven, so it decomposes slowly compared to food scraps or leaves.

For composting to be successful:

- The jeans must be **100% cotton**
- They should be cut or shredded into small pieces
- All metal parts (zippers, rivets, buttons) must be removed

Shredding increases surface area and significantly improves breakdown rates.

When Jeans *Cannot* Be Composted

Most modern jeans are not 100% cotton.

Many contain:

- Elastane (spandex) for stretch
- Polyester blends
- Synthetic stitching thread

Even a small percentage of synthetic fiber makes the jeans unsuitable for composting. These petroleum-based fibers will not biodegrade and can leave behind microplastic contamination in finished compost.

Avoid composting jeans that are:

- Treated with stain-resistant or waterproof coatings
- Heavily printed with plastic-based inks
- Contaminated with oils or chemicals

Operational Reality

From a compost facility standpoint, accepting jeans presents contamination risks. Stretch denim is extremely common, and visual inspection alone often cannot confirm fiber content. If synthetic fibers remain in the finished product, it can compromise compost quality and regulatory compliance.

