



EcoTek® Technology Briefing

What is it? EcoTek is a proprietary SW® nitrile additive that enables nitrile gloves to break down (or biodegrade) in landfills over a much shorter time than untreated gloves.

What to know. EcoTek is the industry leading nitrile treatment, breaking down a nitrile glove by 92.6% in only 2.5 years without any glove performance loss.

- The testing was stopped after 2.5 years because the glove released all gaseous carbon.
- The remaining 7.4% breaks down naturally as there is no residual toxicity.

What does that mean? There are two accepted tests for determining nitrile biodegradability performance. These are referred to as: ASTM D5526 and ASTM D5511.

SW used the more stringent and accurate test – ASTM D5526. This test is much longer than the ASTM D5511 test and uses more realistic landfill conditions.

The EcoTek test was run over 2.5 years, after which time the samples were determined to have biodegraded by 92.6%. The test was stopped after 2.5 years because the EcoTek treated glove had released all gaseous carbon. Using another testing method (ASTM E1963) it was confirmed that EcoTek does not leave toxic residue behind.

> For more information about ASTM testing methods and other industry testing procedures, see the Biodegradable Nitrile Testing Methods Briefing.

EcoTek Details EcoTek is shown to convert 92.6% of the glove's total carbon into gaseous carbon over 2.5 years in common anaerobic landfill conditions.* It has also been proven to be non-toxic to plant life, under the ASTM E1963 testing method. Additionally, EcoTek does not alter the glove performance characteristics.

The EcoTek Footnote SW uses the footnote below when mentioning EcoTek technology and biodegradability. SW does this to conform to industry leading best practices, and to mitigate any concerns that biodegradability claims are overstated.

*Results are from test method ASTM D5526-12. A standard test method for determining anaerobic biodegradation of plastics in a variety of accelerated landfill conditions. Current biodegradation results do not predict future results.

2 Common Questions Q: After the 92.6% has biodegraded, what happens to the remaining 7.4%?

A: The remaining amount is non-toxic and breaks down naturally in landfills.

Q: Do the gloves biodegrade in warehouse storage? Does EcoTek impact shelf life?

A: The EcoTek nitrile additive is activated by the natural anaerobic conditions found in landfills. Normal warehouse shelf life is not impacted.