

THE ECO-FRIENDLY IMPACT OF EACH POLYMER

Are some polymers more eco-friendly than others?

Nearly all polymers are synthetic, human made products to ensure high performance, and do not contain any of the naturally occurring proteins or fats which are required to facilitate biodegradability through microbial interaction. The exception to this rule is Natural Rubber Latex (NRL), a naturally occurring product extracted from trees containing the required ingredients allowing it to biodegrade within a relatively quick period. Below is a high-level overview of each polymer's biodegradable credentials:



Natural Rubber Latex (NRL)



- Natural: made from the extract of sustainable rubber trees.
- Relatively clean production process.
- Effectively degrades within an efficient amount of time. The quickest of all materials.



Nitrile Butadiene Rubber (NBR)



- Synthetic: made from acrylonitrile and butadiene.
- Relatively clean production process.
- Needs an additive to assist with degradation. Without the additive it takes decades.



Neoprene



- Synthetic: made from oil and a product of mining or drilling.
- Relatively clean production process.
- Typically takes 50-80 years to degrade in ideal conditions.



Poly Vinyl Chloride (PVC)



- Synthetic: made from oil and synthetic materials like phthalates, DINP and plasticizers. Contains plastics.
- Very dirty production process.
- Do not biodegrade because of the plastic content. Burning them releases large amounts of toxic emissions.

Ansell believes there is an opportunity to innovate in polymer design with the use of entirely organic materials.