

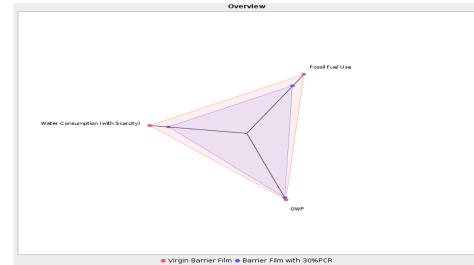
This LCA compares Standard Barrier Film vs Barrier Film with 30% PCR.

<b>Product 1:</b> Standard Barrier Film  <b>Color:</b> Clear  <b>Quantity:</b> 1 (40,000 lbs/Truckload) (Truckloads)	<b>Product 2:</b> Barrier Film with 30% PCR  <b>Color:</b> Clear  <b>Quantity:</b> 1 (40,000 lbs/Truckload) (Truckloads)	<b>Report Number:</b> 2023-06-28T144258  <b>Data Version:</b> COMPASS 2023.1  <b>Region:</b> USA
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These sections show the summary and the total impacts for each selected indicators used for the Life Cycle Analysis. Each indicator is composed of the material extraction, manufacturing, transportation, end of life, and use phase impacts. This will allow you to determine which life cycle phase has the greatest impact.

## LCA SUMMARY

Summary		
Name	Standard Barrier Film	Barrier Film with 30%PCR
<b>Fossil Fuel Use (GJ Deprived)</b>	1,289	1,036
<b>GWP (ton CO2 Eq.)</b>	49	48
<b>Water Consumption (with Scarcity) (m3 world-eq)</b>	21,833	17,618

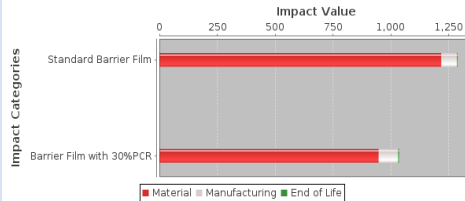


## INDICATORS

**Fossil Fuel Use (GJ deprived)**

This indicator considers the total quantity of fossil fuel consumed throughout the life cycle reported in megajoules (MJ) equivalents deprived/kg dissipated, which is based on an extraction-consumption-competition-adaptation approach. This indicator uses the Impact World+ method, uses the primary energy content, and assumes fossil resources mainly used for energy purposes. Fossil fuels include coal, petroleum, and natural gas.

### Fossil Fuel Use ( GJ deprived )

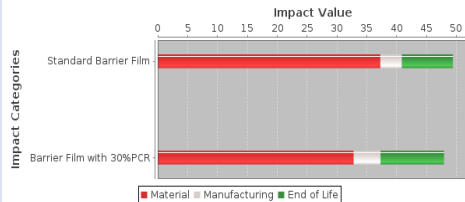


IMPACTS Using Barrier Film with 30% PCR	
Barrels of Oil	41
Average Homes Powered Yearly	7

**GWP ( ton CO2 eq. )**

Global Warming Potential (GWP) considers the total quantity of greenhouse gases (GHG) emitted throughout the life cycle reported in kilograms of CO2 equivalents. This calculation follows the IPCC Sixth Assessment Report (AR6) 2021 100a w/o CO2 Uptake method and considers climate feedback loops. It considers global warming potential for a 100-year timeframe.

### GWP ( ton CO2 eq. )

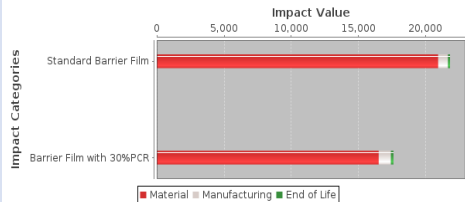


IMPACTS Using 30% PCR Barrier Film	
Passenger Vehicles Driven Yearly	0
Annual Miles Driven by Passenger Vehicles	3,635
Gallons of Gasoline Consumed	167
Tree Seedlings Grown for 10 Years	38
Acres of Forests Yearly	2

**Water Consumption (with Scarcity) ( m3 world-eq )**

This indicator considers the relative available water remaining per area in a watershed after the demand of humans, aquatic ecosystems, and manufacturing process has been met, compared to the world average. The AWARE method is used to calculate the water scarcity footprint, which looks at the potential to deprive another freshwater user by consuming freshwater in a given region. The water scarcity footprint is the water consumption inventory multiplied by a characterization factor, which is based on the availability and demand of freshwater in a given region. The characterization factors have a range of 0.1 to 100, with higher numbers associated with more water-scarce regions, and are dimensionless (m3 world eq./m3). The water scarcity footprint results are typically reported in m3 world-eq, but may be reported in liters world-eq, if there is a small quantity of water being considered in the analysis by EcoImpact-COMPASS.

### Water Consumption (with Scarcity) ( m3 world-eq )



IMPACTS Using 30% PCR Barrier Film	
Gallons of Water 1 cubic meter= 264.2 Gal	1,113,520
Average # of Showers	64,740
People Showering Daily for a Year	177
Olympic Sized Swimming Pools	2

**Note: This LCA represents information about INDEVCO Packaging Solutions products only.** The COMPASS report uses life cycle inventory (LCI) data that represents an industry average for materials, manufacturing processes, and end of life impacts. The Life Cycle Analysis (LCA) in this report can be used for directional guidance in internal decision making and understanding trade-offs. COMPASS follows the guidelines of ISO 14040 in determining and documenting the scope, assumptions, consistent boundary conditions and data sources. According to ISO 14040, LCA results should not be used to make comparative assertions between competitive products to be disclosed to the public without first conducting a third party critical review.

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