

This LCA Compares FFS Film Types

Product Names and Quantity : Virgin FFS Film(1) ,20% PCR FFS Film(1) ,28% PCR FFS Film(1) ,50% PCR FFS Film(1)

Report Number: 2023-07-25T132756  
Data Version: COMPASS 2023.1  
Region: USA

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

Overview				
Indicators	BOMs			
Name	Virgin FFS Film	20% PCR FFS Film	28% PCR FFS Film	50% PCR FFS Film
Fossil Fuel Use	38393.41	32050.27	29513.01	22540.34
GWP	1453.55	1301.78	1241.07	1074.24
Water Consumption (with Scarcity)	629078	511578.37	464578.52	335417.61



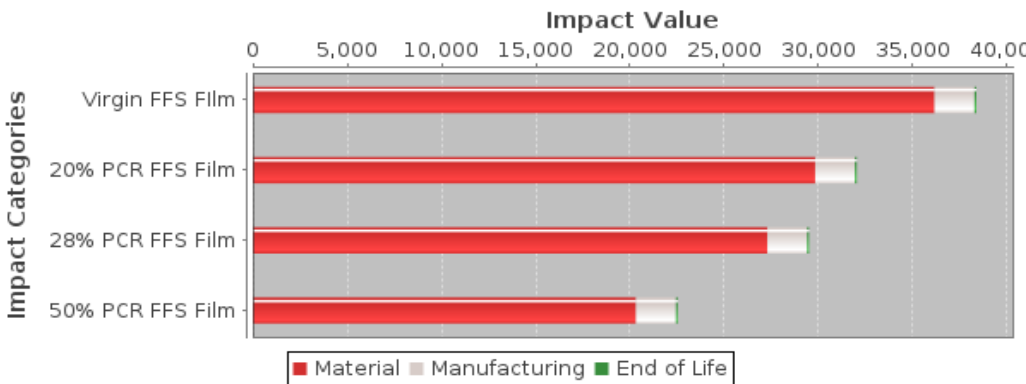
INDICATORS

**Fossil Fuel Use (GJ deprived)**

This indicator considers the total quantity of fossil fuel consumed throughout the life cycle reported in gigajoules (GJ) 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.

IMPACTS	
<b>20% PCR FFS Film</b>	
Barrels of Oil	1036.82
Average Homes Powered Yearly	169.44
<b>28% PCR FFS Film</b>	
Barrels of Oil	1451.55
Average Homes Powered Yearly	237.22
<b>50% PCR FFS Film</b>	
Barrels of Oil	2591.28
Average Homes Powered Yearly	423.47

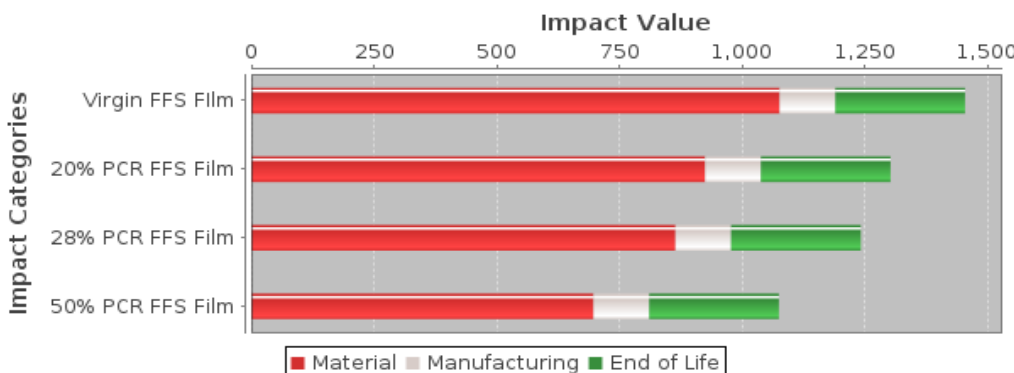
**Fossil Fuel Use ( GJ deprived )**



**GWP ( ton CO2 eq. )** Global Warming Potential (GWP) considers the total quantity of greenhouse gasses (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.

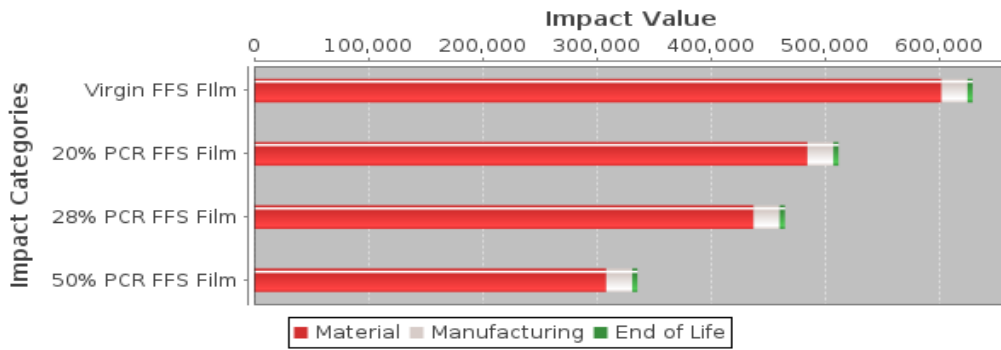
IMPACTS	
<b>20% PCR FFS Film</b>	
Passenger Vehicles Driven Yearly	32.5
Miles Driven by Passenger Vehicles Yearly	371985.12
Liters of Gasoline Consumed	64646.27
Tree Seedlings Grown for 10 Years	3932.88
Acres of Forests Yearly	178.55
<b>28% PCR FFS Film</b>	
Passenger Vehicles Driven Yearly	45.5
Miles Driven by Passenger Vehicles Yearly	520779.17
Liters of Gasoline Consumed	90504.78
Tree Seedlings Grown for 10 Years	5506.04
Acres of Forests Yearly	249.97
<b>50% PCR FFS Film</b>	
Passenger Vehicles Driven Yearly	81.22
Miles Driven by Passenger Vehicles Yearly	929682.07
Liters of Gasoline Consumed	161566.89
Tree Seedlings Grown for 10 Years	9829.24
Acres of Forests Yearly	446.25

**GWP ( ton CO2 eq. )**



**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	
<b>20% PCR FFS Film</b>	
Gallons of Water	31043494.74
Average Showers	1804909.79
People Showering Daily for a Year	4944.96
Olympic Sized Swimming Pools	47
<b>28% PCR FFS Film</b>	
Gallons of Water	43460892.64
Average Showers	2526873.71
People Showering Daily for a Year	6922.94
Olympic Sized Swimming Pools	65.8
<b>50% PCR FFS Film</b>	
Gallons of Water	77585307.81
Average Showers	4510912.29
People Showering Daily for a Year	12358.66
Olympic Sized Swimming Pools	117.46

**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.

Ask about our **Carbon Footprint Reduction Program** to help you improve your company's packaging footprint

INDEVCO Packaging Solutions  
A Division of INDEVCO North America  
www.INDEVCONorthAmerica.com

