Improving sustainability and environmental profiles - without compromising product quality and performance - are essential to the manufacturing process.

Findings from a Life Cycle Assessment (LCA) reveal sustainable advantages in the production of NORDEL™ EPDM, compared to Ziegler-Natta solution EPDM. This is a direct result of improvements in manufacturing process efficiency, which help reduce emissions output.

Producing 1,000 metric tons of NORDEL EPDM vs. Ziegler-Natta solution EPDM reduces greenhouse gas emissions\(^2\) by the equivalent of removing 155,283 gallons of gasoline consumed, 1,509,847 pounds of coal burned, and 296 passenger vehicles driven for one year.

\(^{2}\) U.S. Environmental Protection Agency (EPA), Greenhouse Gas Equivalencies Calculator. Calculations based on raw data from Dow’s LCA.

EPDM rubber helps ensure applications, such as weather seals, roofing and automotive belts, can withstand extreme conditions and wear-and-tear.\(^3\)

\(^{3}\) EPA, Greenhouse Gas Equivalencies Calculator. Calculations based on raw data from Dow’s LCA.

Notes

- Statistics highlighted above are based on findings from Dow’s LCA that reveal sustainable advantages in the production of NORDEL™ EPDM, compared to Ziegler-Natta solution EPDM.
- Acidiﬁcation: Arises from the over-supply of nutrients, which leads to overgrowth of plants and algae.
- Eutrophication: Arises from the over-supply of nutrients, which leads to overgrowth of plants and algae.

PRODUCTS MADE WITH NORDEL EPDM

- AUTOMOTIVE WEATHERSTRIPPING
- AUTOMOTIVE HOSE
- AUTOMOTIVE BELT
- MOLDED RUBBER GOODS
- ROOFING & BUILDING PROFILES
- THERMOPLASTIC MODIFICATION
- OIL & LUBRICANTS
- TIRES

NORDEL EPDM PRODUCTION HAS A SIGNIFICANTLY LOWER ENVIRONMENTAL IMPACT THAN ZIEGLER-NATTA SOLUTION EPDM

Producing 1,000 metric tons of NORDEL EPDM vs. Ziegler-Natta solution EPDM reduces CO\(_2\) emissions\(^3\) by the equivalent of removing 3,382,353 miles driven by an average passenger vehicle per year.

\(^{3}\) EPA, Greenhouse Gas Equivalencies Calculator. Calculations based on raw data from Dow’s LCA.

Sources

1. Dow, NORDEL™ EPDM
2. U.S. Environmental Protection Agency (EPA), Greenhouse Gas Equivalencies Calculator. Calculations based on raw data from Dow’s LCA.
3. EPA, Greenhouse Gas Equivalencies Calculator. Calculations based on raw data from Dow’s LCA.

References

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