

Alphagary's holistic approach to sustainability

The United Nations Brundtland Commission defines sustainability as “Meeting the needs of the present without compromising the ability of future generations to meet their own needs.” **At Alphagary, reducing carbon footprint is more than an aspiration.** We are taking actions at our facilities such as adopting green energy, upgrading to energy-efficient equipment, and recovering energy generated by internal systems.

We are formulating products with recycled content, as well as bio-based, renewable ingredients and participating in circularity programs. Like you, we are mindful of the impact we have on local communities as well as the environment and future we are leaving for our children. As part of the Orbia community of companies, sustainability is an integral part of our commitment to help advance life around the world.



Reducing the ecological impact at our facilities

RENEWABLE ENERGY and ENERGY EFFICIENCY

- Green energy at Alphagary Melton Mowbray (UK)
- Steam reduction at Alphagary Altamira (MX)
- Energy recovery systems (heat, water)
- Investing in state-of-the-art production equipment

CIRCULARITY PROGRAMS

- Alphagary Chinley (UK): collecting post-industrial rigid PVC off-cuts
- Alphagary Altamira (MX) and Cartagena (CO): collecting post-consumer recycled material to be used in INFINITUDE compounds.

Materials formulated to reduce carbon footprint

Compounds

INFINITUDE – flexible PVC compounds with recycled content for mats, hoses, shoe-soles, 60-70°C wire & cable, and various other products

EVOPRENE® ECO – TPE compounds for general purpose consumer goods products such as garden hoses with recycled and/or biobased content

SUPERKLEEN – PVC compounds with FDA-sanctioned ingredients for healthcare and food contact applications.

MEGOLON® ECO – halogen-free compounds for wire & cable datacom and electrical applications formulated with recycled and/or biobased content.

Stabilizers

VINASTAB® 8000 series: Calcium-zinc stabilizers designed for use in PVC materials with recycled content.

Plasticizers

MEXIFLEX® DOTP plasticizers that incorporate recycled PET (bottles).

Resins

From Orbia Polymer Solutions (Vestolit) FUTURE-FIT resins PVC resin with reduced carbon footprint

When we formulate products with sustainable ingredients, we are mindful of the various testing requirements that govern product safety and integrity. **We work with our customers to align with their goals**, making sure we provide products that are formulated and manufactured in a way that supports integrity and repeatability while delivering more sustainable solutions.



Sustainable TPE Compounds for General Purpose Applications

EVOPRENE® ECO



Creating sustainable materials that perform mechanically, process seamlessly, and provide cost effective eco-friendly alternatives to traditional compounds is top-of-mind at Alphagary. Our approach is simple: it needs to make sense for our planet, for our customer, and for the intended application. We embrace this challenge with the same agility that drives our daily innovation -- by listening and then designing materials that meet demanding requirements.

We lab-tested these eco-friendly compounds against the same formulation with traditional raw materials and saw fantastic results:

- SEBS-based compounds, formulated for general purpose applications (food-grade versions available)
- Mechanical properties such as gravity, durometer, and tensile strength are unchanged from prime materials
- Aging studies show good heat resistance
- Flow characteristics are unchanged
- Surface finish is rubbery with a matte finish, just like the prime materials
- Designed for extrusion and molding applications

EVOPRENE ECO 1220-72 Natural **Contains bio-based ingredient**

EVOPRENE ECO 3222-68 Natural **Contains bio-based ingredient + recycled content**

Based on lab results, we are confident of the consistency and repeatability of the mechanical properties of these compounds, and we will provide a Certificate of Analysis (COA) with every shipment as we do with traditional materials.

These materials are formulated to enable our customers to achieve their sustainability targets by using carbon credit. We are happy to provide documentation to support the carbon footprint calculation.

We believe in formulation integrity. When we formulate products with sustainable ingredients, we are mindful of the various testing requirements that govern product safety and integrity.

Our solutions enable our customers to achieve their sustainability targets:

- Using less energy and water
- Investing in renewable energy / efficiency
- Measuring impact via science-based target initiatives
- Achieving carbon neutrality
- Formulating with integrity: marrying performance with sustainability
- Building partnerships across the value chain

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[LINK to Orbia's Impact Report 2023](#)