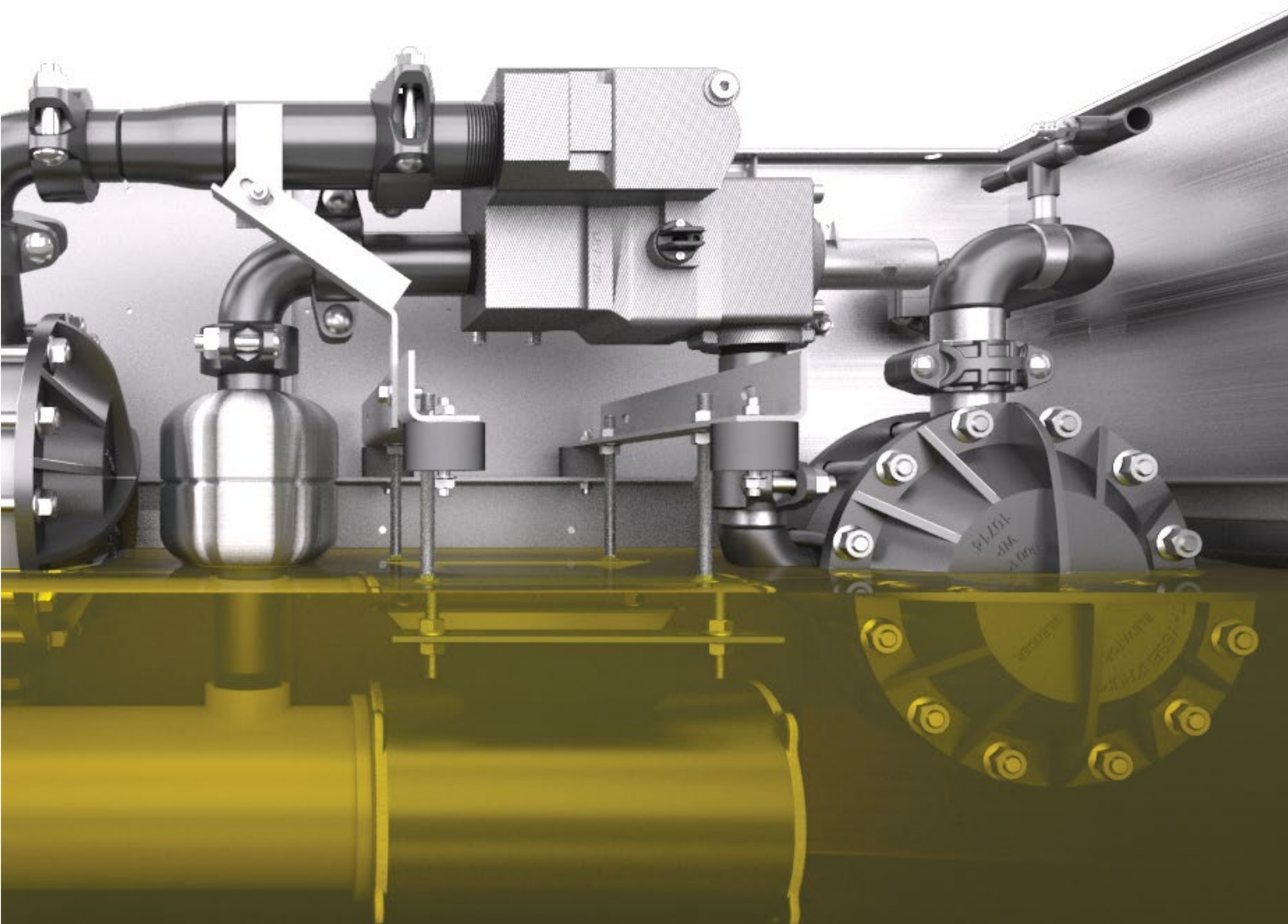


ENVIROMAX[®]

High-Performance Vegetable-Based
Hydraulic Fluid



Delivering Improved Performance & Energy Savings



The Partnership

When TK Elevator partnered with Renewable Resources LLC to develop enviromax, the elevator industry's first performance improving vegetable-based fluid for use in hydraulic elevators.

The Product

Formulated from canola oil, which is rapidly renewable and readily biodegradable, enviromax has minimal effects on the environment. When tested at an independent laboratory for aquatic toxicity, the results were well above government standards.

TK Elevator: moving beyond

TK Elevator is showing the way forward – with products, services and cloud-based solutions that understand people's individual relationships with the tools and technologies that move them. Since 1937, our hydraulic elevator system has been the standard for quality and reliability. Our hydraulic product endura continues that heritage as a smooth, quiet, and efficient workhorse that exceeds the demands of today's low-rise buildings.

The petroleum-free hydraulic elevator

Traditionally, hydraulic elevators have relied on petroleum-based fluid to operate. This has given the hydraulic elevator a bad image from an environmental standpoint, opening users up to possible risks associated with groundwater contamination, soil remediation, and a reliance on non-renewable resources. With enviromax®, TK Elevator welcomes you to the future of hydraulic elevators. It's the same efficient workhorse – just performing better and without the risks associated with petroleum fluids and heavy metal additive packages.

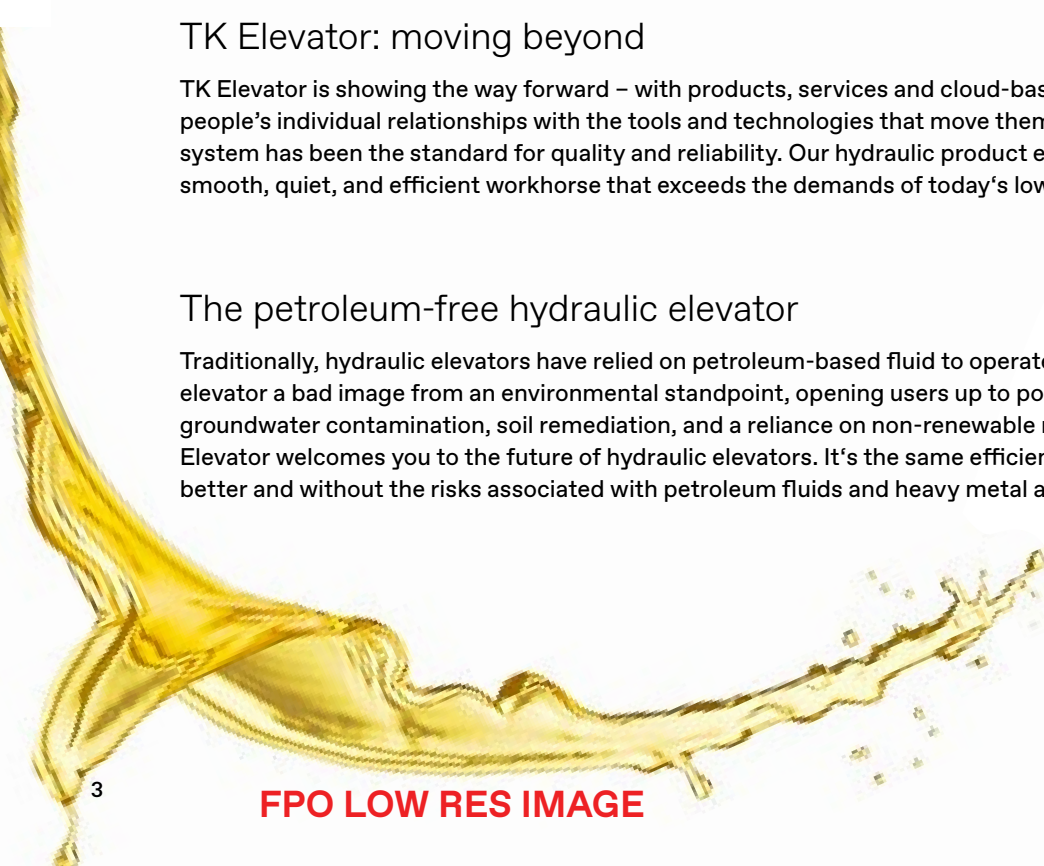
Enviromax



- + USDA BioPreferred with 92% Biobased Content
- + 95% petroleum free
- + 100% recyclable
- + Readily biodegradable
- + Rapidly renewable
- + Energy conserving and cost saving
- + Temperature stable
- + Made in North America
- + Contains no zinc
- + High lubricity and viscosity

Other Hydraulic fluids

- Made from crude oil
- May contaminate the environment
- Made from non-renewable resources
- Adversely affected by temperature
- Have a risk of groundwater contamination



High Performance. Low Impact.

The Definitions

Biodegradability: Ability to decompose back to natural elements, enviromax is classified as "Readily Biodegradable" and exceeds the highest standards for biodegradability.

Lubricity: The measure of the reduction in friction of a lubricant. enviromax has extremely high lubricity, resulting in less wear and tear than traditional hydraulic lubricants (oils).

Toxicity: The harmfulness of a substance. enviromax meets congressional standards as a low-toxicity substance.

Viscosity: Extent to which a fluid resists the tendency to flow. enviromax, unlike other hydraulic fluids, remains stable across a wide temperature range.



Enviromax

- 1 Consistent floor leveling over a greater range of temperatures
- 2 Improved equipment protection
- 3 Low odor
- 4 Improved two-stage jack operation
- 5 Improved lubrication
- 6 Less friction
- 7 Ultra-low toxicity in case of spill

The Performance

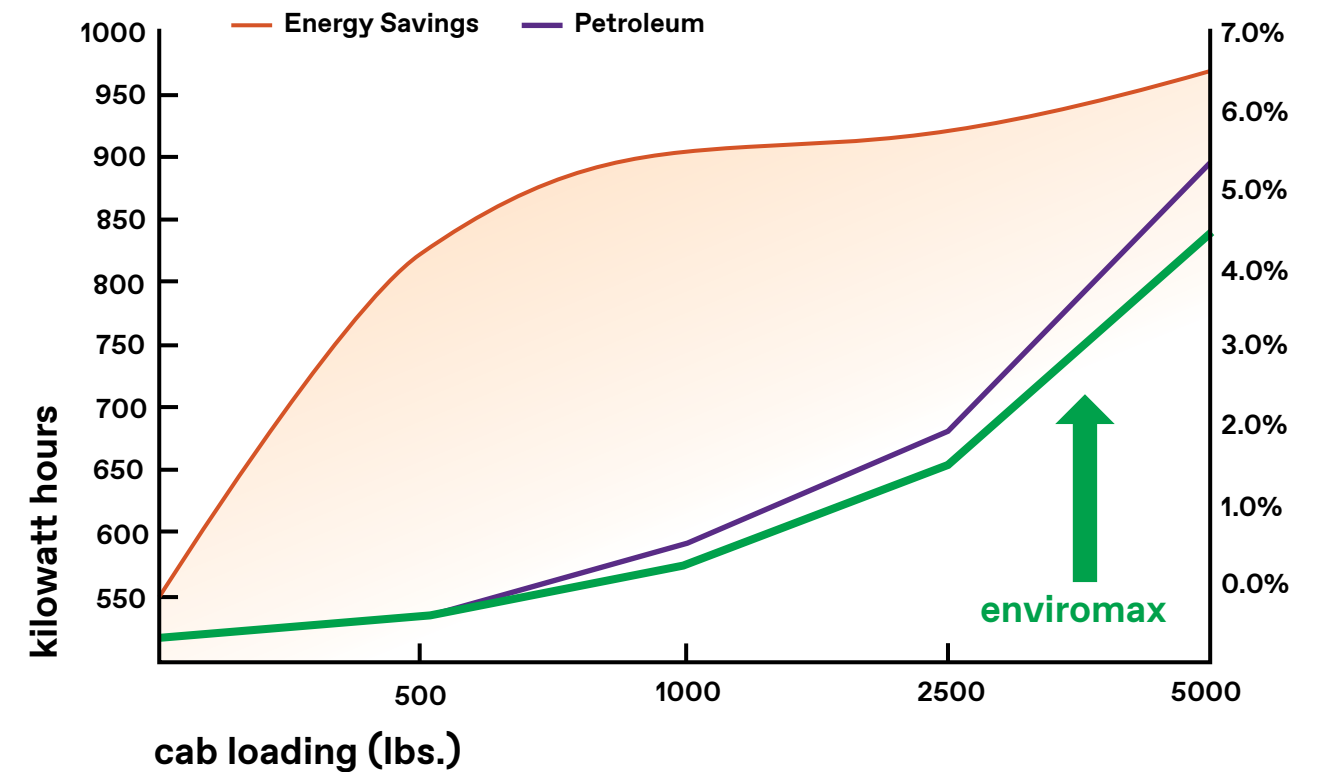


The viscosity of liquids decreases as temperature increases. enviromax has a very high viscosity index. Unlike other hydraulic fluids, enviromax optimizes performance because it operates consistently across a broad temperature range. It uses high oleic base oils, which reduce the tendency to oxidize (oxidation decreases the effectiveness of oil).

Valves that maintain elevator entryway leveling are precision devices. These devices require a constant viscosity in order to maintain peak performance. Unfortunately, petroleum-based oils have a narrow threshold before the oil starts to either thicken or thin out. This affects the valve performance. Since enviromax has a high viscosity index, less valve adjustments are necessary, reducing potential service calls.

enviromax may eliminate the need for a mechanical oil cooler and/or heaters that keep oil at optimum temperatures to prevent thickening. These devices consume energy, because they cycle on even when the elevator is not in operation.

Weight versus power consumption



Frequently Asked Questions

Should I change the hydraulic fluid in my elevator?

Yes. Eventually, if it is not changed, old hydraulic fluid will affect system performance. This can lead to wasted energy, leveling issues, increased potential for fall hazards, and slower floor-to-floor times.

Will enviromax improve the performance of the elevator?

Yes. It is more stable through load and temperature ranges, which means a smoother ride. In our testing, it is more energy efficient than brand new petroleum oil.

Why would I change my oil if it is still working fine?

It is important to think in terms of prevention. In the case of a catastrophic leak of traditional petroleum-based fluid, the Environmental Protection Agency (EPA) enforces removal and clean up at considerable costs to the building owner.

Why is enviromax so much better for the environment?

enviromax is readily biodegradable, 95% petroleum-free and 100 percent recyclable. It exceeds the highest standards for biodegradability. It takes only one year to regenerate instead of the tens of thousands of years required for petroleum-based fluid. And, it can be easily recycled and reused in a variety of products.

Does enviromax have a bad odor?

No, it does not. enviromax is blended, so it does not entrap air or vaporize like other petroleum or vegetable-based products which can leave a rancid smell and/or oily film on walls and machinery.

Is this plant-based similar to ethanol?

Yes, enviromax is canola-based. In fact, it is the elevator industry's first high-performing vegetable-based hydraulic fluid.

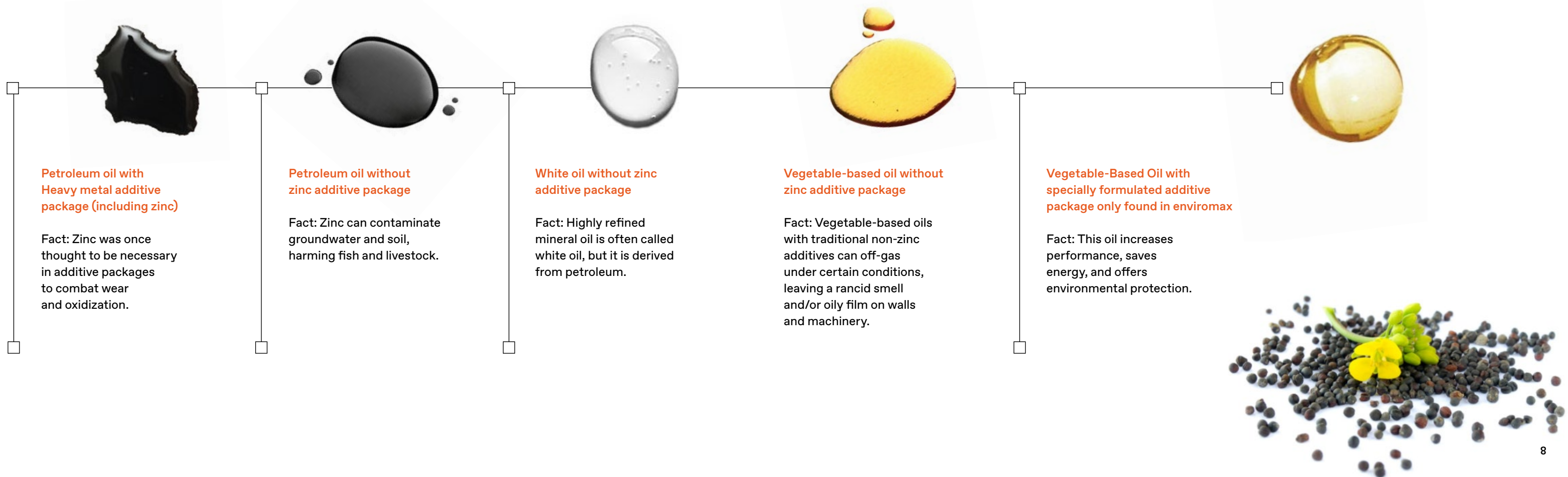
Does this product work with all hydraulic elevators? Old, new, TK Elevator, or foreign?

Yes. enviromax has been tested on multiple valves and hydraulic systems without issues.

Does enviromax adversely affect the operation of my elevator's valves, motor, pump, etc.?

No. enviromax has a specially formulated additive package that improves lubricity in the elevator system and reduces wear and tear on all components.

THE EVOLUTION OF OIL



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