

## What Is a Synthetic? Depends On Whom You Ask.

Get what you pay for. When it comes to dust suppressants and soil stabilizers, you have to be word smart so you get what you are paying for. Just as words like rich, natural and “lite” carry a range of meanings colored by perspective, so too does the word synthetic.

### Confusion in the marketplace

Plain and simple: Some chemical liquids are synthetic fluids. Others are not; they are oil products. The two are as different as apples and oranges. The problem is that manufacturers may

present their “oranges” (oils) as synonymous with our “apples” (synthetic fluids), and there are potentially costly consequences that can arise from such misrepresentations.

That is why everyone buying a dust suppressant or soil stabilizer whose manufacturer uses the word synthetic in its description needs to understand what they are buying. And, just as importantly, what the selection means in terms of performance, cost of ownership, environmental safety.

### Synthetic Fluids vs. Oil, A Side-by-Side Comparison

	<b>Synthetic-Fluid Based</b> <small>(e.g., EK35, EnviroKleen)</small>	<b>Oil</b> <small>(e.g., Competitor)</small>
Where applied	250,000 ft <sup>2</sup> gravel runway	250,000 ft <sup>2</sup> gravel runway
Application rate	1 gallon / 40 ft <sup>2</sup>	1 gallon / 30 ft <sup>2</sup>
Gallons required	6250	8333
Delivery	275-gallon totes	275-gallon totes
Costs of ownership	<ul style="list-style-type: none"> <li>• Product</li> <li>• Freight</li> </ul>	<ul style="list-style-type: none"> <li>• Product</li> <li>• Freight</li> </ul>
Potential additional costs		<ul style="list-style-type: none"> <li>• Double-walled totes or containment diking</li> <li>• Oil spill containment materials</li> <li>• SPCC Tier I Plan preparation and implementation</li> <li>• Repeated maintenance</li> <li>• Cost of a reportable Incident</li> </ul>

## Synthetic Organic Dust Control® — The Gold Standard

Because dust and the older oil products used to reduce it can have a profound negative effect on human and animal health, aquatic systems, food sources and other plant life, Midwest set out to invent a new environmentally-sound technology for dust mitigation in the late 1990s.

We call the result Synthetic Organic Dust Control® (SODC), a game-changing manufacturing process used to create synthetic fluids that are more environmentally sound and freer of regulations.

### What exactly is a synthetic fluid?

Synthetic fluids, according to the EPA, are the result of a chemical change, hydro-isomerization, during which molecules are subjected to great heat and pressure which blow them apart to form an entirely new substance that no longer has a petroleum base.

In EPA language, a fluid is not a synthetic unless it is "a material produced by the reaction of a specific purified chemical feedstock, as opposed to the traditional base fluids such as diesel and mineral oil which are derived from crude oil solely through physical separation processes." Midwest's EK35® and EnviroKleen® meet EPA standards.

### Why choose a synthetic?

A synthetic fluid is safe for the environment. It delivers better performance, has a lower cost of ownership, and is not subject to cumbersome regulations. Oil dust suppressants are regulated, which puts a burden on users. A facility that stores, processes, refines, uses or consumes oil must: prevent oil spills, prepare and Implement an SPCC plan, and in case of a spill or release of oil into the navigable waters of the United States, notify the National Response Center (NRC) and state and local authorities. Reportable incidents can have costly consequences in addition to regulatory fines.

The EPA's methodology to measure whether a base fluid qualifies as a synthetic is the most stringent and well-defined in terms of PAH content, oil sheen, toxicity, and biodegradability. A genuine synthetic delivers the highest level of environmental protection and performance.

Midwest is a world leader in effective and environmentally-sound dust control, erosion control, soil stabilization and anti-icing solutions. To learn more about this issue or to ask us any questions, contact us at 1.800.321.0699.