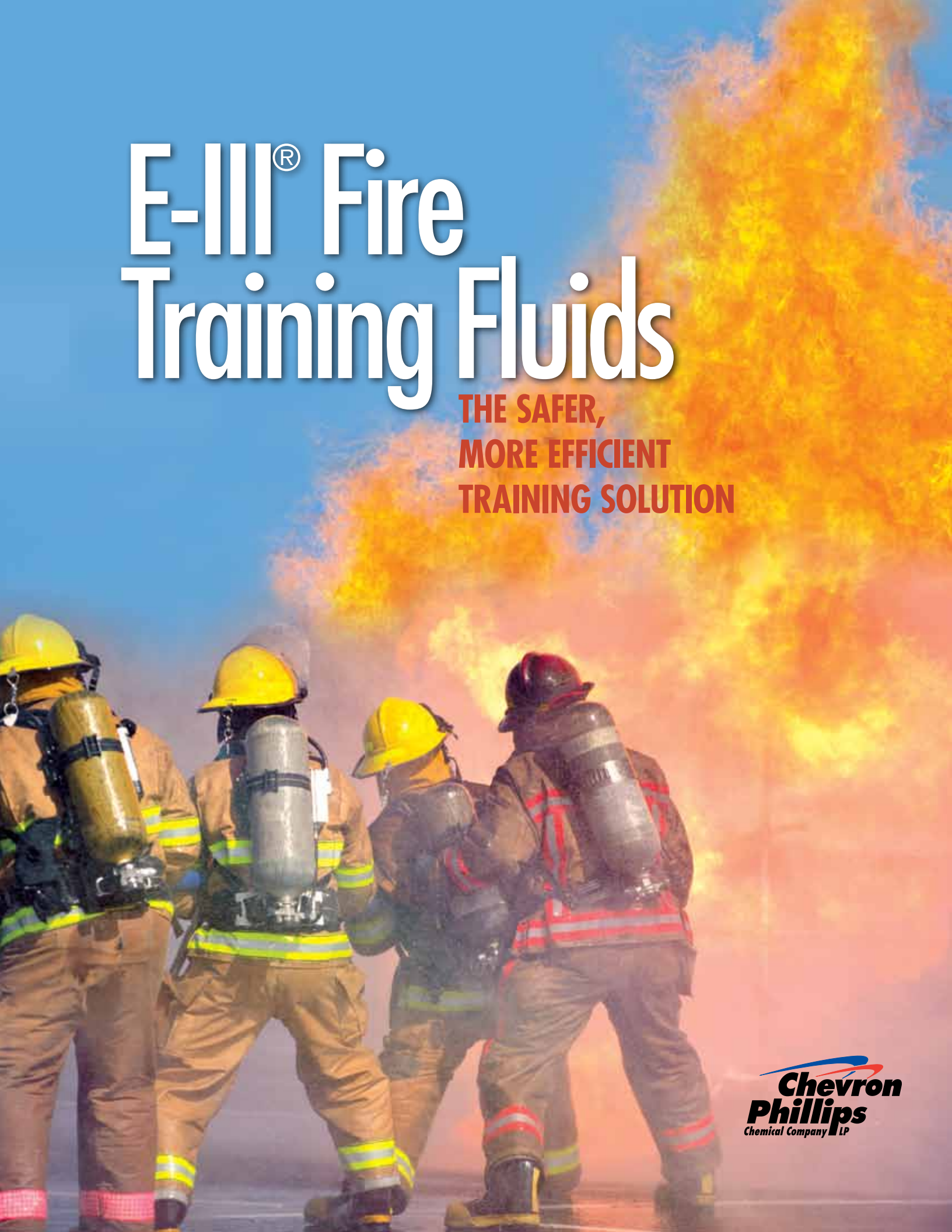


E-III® Fire Training Fluids

THE SAFER, MORE EFFICIENT TRAINING SOLUTION

Chevron Phillips Chemical Company LP

Safer, More Efficient

Experience is key when it comes to firefighting and Chevron Phillips Chemical Company LP's E-III® Fire Training Fluids (FTFs) allow live fire training facilities to simulate realistic hydrocarbon fires used for training emergency response personnel.

PRODUCT PROFILE

PROPERTIES	AVIATION GRADE	INDUSTRIAL GRADE
Appearance	Colorless Liquid	Blue Liquid
Flash Point, °F(C°)	104° (40°)	<50° (10°)
Odor	Mild	Mild
Specific Gravity @ 60/60°F (H_2O=1)	0.754	0.734
Vapor Density (Air = 1)	>1	>1
Volatile Components, Vol%	100	100

With special live fire training fluids like E-III® FTFs, field training officers can produce a challenging training scenario that is safer for both firefighters and the environment than traditional fuels.

E-III® FTFs are specially blended fluids with the power and stability of traditional fuels, but with fewer emissions of less than 1ppm sulfur when burned.

Available in both aviation and industrial grades, the fluids are designed to provide a training environment that accurately simulates aircraft, motor vehicle and watercraft liquid petroleum fuel fires. They also have the ability to simulate moving and cascading engine-fuel fires that are typical in marine, chemical processing and refinery environments.

Aviation Grade

The E-III® Aviation Grade FTF can be used to accurately simulate aircraft fire training. Additionally, the product emits no detectable odors until heated and complies with NFPA 30 Flammable and Combustible Liquids Code.

The high flash point of the aviation grade lends itself to safer operations since it has not been shown to generate pockets of unstable, flammable gas during training operations.

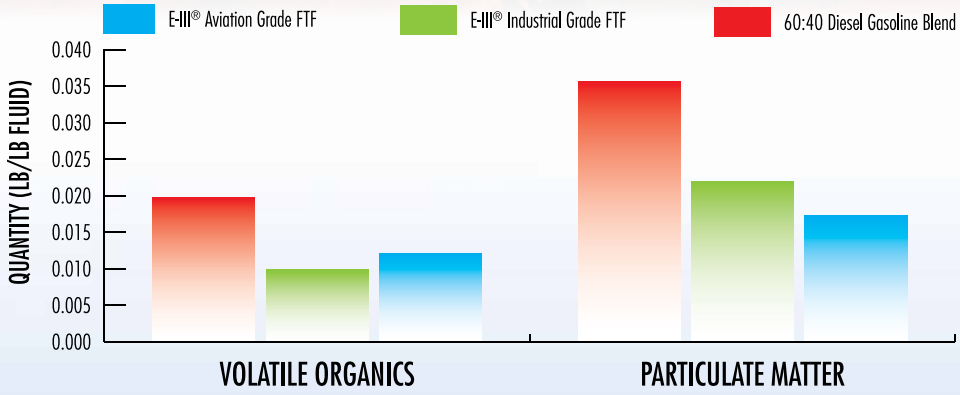
The radiant heat of the fire exceeds 700°F and, when aerated through nozzles and under pressure, E-III® FTFs burn similarly to a ruptured fuel line.

Industrial Grade

The E-III® Industrial Grade FTF is useful for chemical plant training by refineries, port authorities, municipalities and live fire training schools that may require training for hydrocarbon fires.

E-III® FTFs create a signature smoke that assists in fire detection and is useful for determining wind direction. As the product burns, the smoke becomes clearer and dissipates more readily, creating a training environment that is more neighbor-friendly than traditional fire training fuels.

Training



Environmental Advantage

E-III® FTFs burn purer than traditional fossil fuels, and their unburned resides are stable and non-corrosive.

Using FTFs can result in cleaner runoff water after surface burns, and pits and mock-ups may become cleaner because of the products' ability to burn off existing residuals. Prop structures used for fire simulations can also become cleaner when using E-III® FTFs than when burning gasoline or diesel fuel.

E-III® FTFs are uniquely identified by the production of less and lighter colored smoke than traditional fossil fuels as a result of their unique chemical makeup.

Combustion emissions from E-III® FTFs contain lower levels of VOCs and particulate matter than emissions from traditional fuels and less than 1ppm sulfur as demonstrated through the test results above.

Financial Benefit

When compared to traditional fossil fuels, the use of E-III® FTFs can result in considerable cost savings for live fire training facilities.

Users require up to 30 percent less material to produce an accurate fire simulation and the unburned product can be recovered and reused for future training. Since E-III® FTFs are controllable by water, less extinguisher chemicals and foam are required to manage the simulation.

Additionally, users experience reduced clothing cleaning costs because pre-wetted protective clothing will not absorb the product.

E-III® FTFs also produce less residue than traditional fuels, leading to savings in the reduction of maintenance and carbon deposit cleanup for firefighting props and wastewater treatment.

BETTER THAN THE AVERAGE FUEL

E-III® FTF combustion emissions contain lower levels of environmental pollutants such as aromatics, benzene, nitrogen and sulfur than those of traditional fuels.

The combustion emissions contain lower levels of carcinogens, benzene, formaldehyde, heavy metals and particulates (or particulate matter) than do the emissions from traditional fuels. Additionally, E-III® FTFs emit no detectable odors until heated.

LOW
MEDIUM
HIGH
VERY HIGH

ENVIRONMENTAL POLLUTANTS	COMMON FIRE TRAINING FLUIDS			
	E-III® Fire Training Fluids	Kerosene	Diesel	Gasoline/ Diesel Blend
Aromatics	LOW	HIGH	HIGH	HIGH
Benzene	LOW	MEDIUM	MEDIUM	VERY HIGH
Explosive Vapors	LOW	HIGH	MEDIUM	HIGH
Heavy Metal Particulates	LOW	MEDIUM	VERY HIGH	HIGH
Nitrogen	MEDIUM	VERY HIGH	VERY HIGH	VERY HIGH
Sulfur	LOW	VERY HIGH	VERY HIGH	VERY HIGH

Chevron Phillips Chemical Company LP is a global leader in the manufacture of specialty chemicals marketed and distributed in more than 40 locations worldwide. Our products are utilized as raw materials, intermediates and end-use applications such as Scentinel® Natural Gas Odorants, E-III® Fire Training Fluids, EcoSolv® Dry Cleaning Fluids and ForSField™ Protective Coatings.

Chevron Phillips Chemical offers more than quality products. Our dedicated sales, customer service and technical support staff are stationed around the globe to provide you with prompt and knowledgeable assistance to meet your needs. Additionally, our research and development team is aggressively developing new products, searching for new applications and derivatives of existing products, and evaluating opportunities to form strategic partnerships in both new and existing technologies.

Chevron Phillips Chemical is equally owned by Chevron Corporation and Phillips 66, and is headquartered in The Woodlands, Texas.

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