FUEL OX® with Combustion Catalyst

Health, Safety & Environment Statement

Fuel Ox® with Combustion Catalyst is a patented, EPA-registered fuel additive developed from technology originally formulated at AT&T Bell Laboratories. This document provides a consolidated HSE reference for government, municipal, and sovereign authority use, covering product safety characteristics, handling requirements, and documented environmental and public health benefits derived from independent third-party testing.

PRODUCT SAFETY PROFILE

Fuel Ox is used at a treatment ratio of 1:10,000 (one part additive per ten thousand parts of fuel). At this concentration, the product presents no meaningful hazard in normal operational use. Standard diesel handling protocols are fully adequate.

SAFETY PROPERTY	STATUS
Fire hazard	None — flash point 161–162°F
Explosion hazard	None
Skin/eye contact	Rinse with water; no lasting effect
Inhalation risk	Ventilate workspace; no lasting effect
Carcinogenicity	SDS Cat. 1B applies to concentrated raw ingredients only; at 1:10,000 in fuel no elevated handling risk above standard diesel
Transport regulation	Not regulated — DOT, IMDG, IATA
California Prop 65	No listed substances
Reactivity	Stable under normal conditions
Environmental release	Notify authorities; rapidly degradable

HANDLING & STORAGE REQUIREMENTS

- Wear gloves and safety glasses when handling concentrate
- Ensure good ventilation at the point of dosing
- Store locked up in a cool, well-ventilated location
- Use original container; do not re-use empty containers
- Dispose in accordance with local regulations
- No specialist PPE, hazmat equipment, or special facilities required for routine use

REGULATORY CERTIFICATIONS

- EPA-registered fuel additive (Title 40 CFR)
- ASTM D-975 compliant — certified by First Energy Laboratories, USA
- EN-590 compliant — certified by Intertek Group PLC, Paris
- California Proposition 65: no listed cancer or reproductive hazard substances
- TSCA (Toxic Substances Control Act): components listed on TSCA inventory

DOCUMENTED ENVIRONMENTAL BENEFITS

The following reductions in harmful emissions have been documented by independent third-party testing organizations including Intertek Group PLC (UAE), Instruments Lab S.A.C. (Peru, 14,000 ft elevation), and Sudelac Limited (Scotland). Results represent averages across controlled trials.

EMISSION TYPE	AVG. REDUCTION	MAX DOCUMENTED
Particulate Matter (PM)	**~67% avg**	84.3% (Peru mine)
Nitrogen Oxides (NOx)	**10–53%**	52.8% (Peru mine)
Nitrogen Monoxide (NO)	**12–70%**	69.6% (Peru mine)
Carbon Dioxide (CO_2)	**15–20%**	20.5% (Intertek UAE)
Hydrogen Sulfide (H_2S)	**12–67%**	67.3% (Peru mine)
Sulfur Dioxide (SO_2)	**Reduced to zero / below detection limit**	78.2% (Peru mine)
Soot / Black Carbon	**50–70%**	70%+ (multiple trials)
DEF Fluid Consumption	**15–17%**	49.6% (Cali Carting, NJ)

PUBLIC HEALTH & ENVIRONMENTAL IMPACT

Diesel combustion is among the primary contributors to urban air quality degradation, respiratory disease, and climate-related emissions. Fuel Ox directly addresses these concerns at the point of combustion:

- Particulate matter reductions of up to 84% directly improve air quality and reduce respiratory disease risk in communities near vehicle and generator operations
- NOx and SO_2 reductions lower acid rain precursors and ground-level ozone formation
- CO_2 reductions of up to 20% support national carbon reduction commitments and climate targets
- Fuel efficiency gains of 6–9% reduce total fuel consumption and all associated emissions proportionally
- Fuel stabilization eliminates microbial growth in storage tanks, reducing risk of contaminated fuel entering water systems
- Active on five continents across sovereign governments, military operations, mining, marine, and municipal fleets — 13 years of clean operational record

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