



BIO-ORGANIC CATALYST
THE POWER IN NATURE®

BIO-CATALYTIC TREATMENT OF PETROLEUM HYDROCARBONS

NONTOX®



NONTOX® is a powerful bio-catalytic agent for the cleaning of soils and all hard surfaces of TPH (Total Petroleum Hydrocarbon) pollutants, releasing the TPH pollutants in a form more compatible for microbial remediation.

NONTOX® stimulates natural biological reactions within indigenous microbial ecosystems through enhancement of oxygen transfer supporting accelerated remediation rates of the TPH pollutants.

NONTOX® will treat virtually all TPH pollutants, including: crude oil, jet fuel, and diesel oil.

- Enhances remediation of TPH (Total Petroleum Hydrocarbons).
- Provides excellent surface cleaning and release of TPH components.
- Treats all types of petroleum hydrocarbon contamination.
- Helps in the precipitation of metals in wastewater discharges.
- Reduces time associated with soil and water remediation and cleanup.
- Provides immediate and ongoing VOC (Volatile Organic Compounds) suppression.
- Reduces fire hazards, increasing flash points, and auto ignition threshold points, in gasoline or fuel oils.
- Does not require personal protective equipment.

NONTOX® is fully compatible all application equipment, including: hand or power sprayers, helicopter, airplane, or floating equipment. **NONTOX®** requires no special personnel protective equipment.



SEAL OF SAFETY™

The Bio-Organic Seal of Safety™ is our trademark declaration of our commitment to offering green biocatalytic solutions that shift the treatment of our water resources to a more sustainable ecological model.

APPLICATION RATE / CONCENTRATION

NONTOX® may be applied to TPH contaminated soil, shorelines and beaches: a dilution of **NONTOX®** at dilutions of 0.2% - 2%. Rates of application will vary with TPH concentrations, equipment specifications, and soil types.

For general dilution ratios, use a mixture of 4 gallons (15.2 liters) of Water containing 1 gallon (1 Liter) of **NONTOX®** to treat 1 cubic yard of contaminated soil.

NONTOX® should be allowed to penetrate for up to 30 minutes to maximize contact time. Type of power washing system will determine optimum dilution rate.

Cleaning Dilution:

For Light Cleaning: Use 1 part **NONTOX®** per 256 parts water.

For Heavy Cleaning: Use 1 part **NONTOX®** per 50 parts water.

Conditions for Use: Water salinity does not negatively affect product performance. Water temperature under 2°C can affect product performance. Aged or highly viscous concentrations of hydrocarbon may require presoaking prior to removal.

Optimum Storage Temp: 25°C to 40°C with no phase separations or chemical changes observed.

Flammability: None

Shelf Life: Maximum 2 years.

Special Handling and Worker Precautions for Storage and Field Application: None

Skin, Eye and Hand Contact: Use of protective eyewear and rubber gloves is recommended under normal GMP's.

Ventilation: None required; Respiratory Protection: None

Maximum and Minimum Storage Temperatures: Maximum temp: 50°C, Minimum temp: 2°C

Information on Basic Physical and Chemical Properties

Appearance

Physical State

Color

Odor

pH

Liquid

Colorless - pale amber

Mild

Full Strength Concentrate 3.9 - 4.3

At recommended use dilutions, pH ranges 6.3 to 6.9

See Pour Point

Freezing Point

Boiling Point (760 mmHg)

Flash Point

Density (water = 1)

Water Solubility

Kinematic Viscosity

Pour Point

> 100 °C at 760 mmHg Calculated

ASTM D 93 Closed Cup >93oC

1.002 @ 20°C / 20°C

100% in water

@ 40oC 2.3373 cst

2.22°C or (+28°F)

Environmental fate: Persistence and Degradability:

The material is readily biodegradable. Passes OECD test(s) for ready biodegradability.

NONTOX®

MANUFACTURED IN THE USA UNDER
DOMESTIC AND INTERNATIONAL PATENTS

bio-organic.com