JMN SPECIALTIES, INC.
1100 Victory Drive - Westwego, LA 70094
PO Box 189 - Westwego, LA 70096

PRODUCT BULLETIN

BIOSPEC 147

Microbial Hydrocarbon Degrader and Spill Treatment Concentrate

General Description

BIOSPEC 147 is a water-based microbial hydrocarbon degrader specifically formulated for the treatment and bioremediation of petroleum hydrocarbons, oily residues, organic waste, and fuel-contaminated surfaces and soils. The formulation combines naturally occurring, non-pathogenic microbial cultures with specialized wetting and penetration agents to promote rapid contact between the microbial system and hydrocarbon contamination. **BIOSPEC 147** is designed for use in hydrocarbon spill response, contaminated soil treatment, tank and pipeline cleaning operations, oily wastewater systems, sludge reduction programs, and general industrial bioremediation applications. The product may be used in fresh water or saline environments and is compatible with many industrial and municipal wastewater treatment systems when applied appropriately. The microbial cultures contained in **BIOSPEC 147** are selected for their ability to metabolize a broad range of hydrocarbon materials including paraffinic, aromatic, asphaltic, and naphthenic compounds commonly associated with crude oil, fuels, lubricants, and hydrocarbon processing wastes. During the biodegradation process, hydrocarbons are converted into simpler biodegradable compounds including carbon dioxide, water, and microbial biomass.

Applications

BIOSPEC 147 is designed for use in petroleum and hydrocarbon spill response, contaminated soil treatment, oily wastewater systems, sludge reduction programs, tank bottom treatment, separator cleaning support, pipeline and equipment decontamination, refinery and petrochemical cleanup operations, marine and shoreline remediation, and general industrial bioremediation applications. The product may be applied to crude oil residues, fuels, lubricants, oily sludge, hydrocarbon-contaminated soils, and organic waste streams where biological degradation and hydrocarbon reduction are desired. **BIOSPEC 147** is suitable for use in both fresh water and saline environments and may be incorporated into many industrial and municipal wastewater treatment programs when used appropriately.

Features and Benefits

BIOSPEC 147 is a water-based, nonflammable microbial treatment concentrate formulated with naturally occurring, non-pathogenic microbial cultures and specialized wetting agents designed to improve penetration and contact with hydrocarbon contamination. The formulation helps accelerate the biological degradation of petroleum hydrocarbons and organic waste while promoting wetting, dispersion, and treatment of contaminated surfaces and soils. **BIOSPEC 147** helps reduce hydrocarbon vapors and surface sheen and is effective across a broad range of hydrocarbon contamination including crude oils, fuels, oily sludge, and refinery residues. The concentrated liquid formulation is economical to dilute and apply and is compatible with multiple application methods including spray systems, foam systems, pressure washers, and water trucks. The product is readily biodegradable, low VOC, and suitable for use in many biological wastewater treatment systems.

The information contained herein is provided in good faith, but shall not create any warranty, expressed or implied, by operation of law or otherwise, with any respect to any product.
JMN SPECIALTIES, INC. SPECIFICALLY DISCLAIMS ALL WARRANTIES, INCLUDING THOSE OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.
Phone (504) 341-3749 Fax (504) 341-5868 or E-mail: sales@jmnspecialties.com

Directions for Use

BIOSPEC 147 is supplied as a liquid concentrate and should be diluted with clean water prior to application. Typical dilution ratios range from 3% to 10% depending on contamination severity, hydrocarbon type, and site conditions.

Apply the diluted solution directly onto contaminated surfaces, soils, sludge, or hydrocarbon residues using spray equipment, foam systems, pressure washers, watering systems, or other suitable application equipment. Agitation, mixing, or soil tilling may improve contact between the microbial system and the contamination and may enhance treatment effectiveness.

For oily wastewater systems and biological treatment operations, application rates should be determined based on contaminant loading, retention time, temperature, oxygen availability, and system design. Pilot testing is recommended when treating heavily contaminated systems or unusual waste streams.

For best biological activity, maintain:

- pH: 6.0 – 9.0
- Temperature: 50°F – 104°F (10°C – 40°C)
- Adequate oxygen availability

Compatibility

BIOSPEC 147 is compatible with many hydrocarbon-contaminated soils, wastewater systems, and industrial cleanup applications. Strong oxidizers, highly acidic conditions, highly alkaline conditions, and biocidal chemicals may reduce microbial effectiveness. Avoid prolonged exposure to excessive heat or freezing conditions during storage.

Environmental Information

BIOSPEC 147 is a water-based microbial treatment product formulated with biodegradable components and naturally occurring, non-pathogenic microbial cultures. When used as directed, the product is intended to support the biological breakdown of hydrocarbon contamination and organic waste. Disposal of recovered contamination and cleanup residues should be performed in accordance with applicable local, state, and federal regulations.

Regulatory Information

Based on the current formulation, **BIOSPEC 147** is classified as a nonflammable, water-based product and is not regulated as a hazardous material for ground transportation under U.S. DOT regulations when shipped in non-bulk packaging. Users are responsible for determining suitability for their specific application and regulatory requirements.

Physical Properties

Appearance:	White to light tan opaque liquid
Odor:	Mild / Bland
pH:	6.0 – 8.0
Specific Gravity:	1.00 – 1.02
Solubility in Water:	Complete
Flash Point:	None / Nonflammable
VOC Content:	< 1%
Freeze Point:	Approximately 32°F (0°C)

(Typical values; not a specification)

Availability

BIOSPEC 147 is available in UN approved 5-gallon pails, and 55-gallon drums and bulk quantities.

Handling and Safety

For industrial and professional use only. Avoid contact with eyes and prolonged skin contact. Avoid breathing mist or spray. Use with adequate ventilation and appropriate personal protective equipment. Wash thoroughly after handling. Refer to the Safety Data Sheet (SDS) for complete handling, storage, transportation, and disposal information.

The information contained herein is provided in good faith, but shall not create any warranty, expressed or implied, by operation of law or otherwise, with any respect to any product.
JMN SPECIALTIES, INC. SPECIFICALLY DISCLAIMS ALL WARRANTIES, INCLUDING THOSE OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

Phone (504) 341-3749 Fax (504) 341-5868 or E-mail: sales@jmnspecialties.com