

SOLVING A WORLD OF PROBLEMS THROUGH BIOTECHNOLOGY

DESCRIPTION

TRAVENA oil absorbent pillows are designed to be used in interceptors and drainage culverts. They will preferentially absorb oils and greases and cause accelerated breakdown of absorbed hydrocarbons by bacterial action. Designed for continuous absorption of oil but may be used to absorb excess oil and grease from casual spillages.

RECOMMENDED PROCEDURES

TRAVENA Bioremediation Pillows are suitable for use in all interceptors receiving small and continuous run off of oily water. May also be used to absorb adhoc spillage's passed to interceptors. Place *Bioremediation Pillows* on the surface of the layer of oil to be treated and tie in place, allowing the pillow to break the surface layer.

Replace as necessary to ensure continued natural bacterial action. Normal replacement interval is approximately six months.

TECHNICAL INFORMATION

Bioremediation Pillows are specially treated to give oleophilic (oil attracting) properties with hydrophobic (water repellent) filament yam. The choice of fibre and the construction has been optimised to give an exceptionally high void volume of 92% for maximum absorption.

Stitch bonding provides high tensile strength, dimensional stability and prevents breakdown when fully loaded with oil.

After use each pillow can be disposed of as dry waste since hydrocarbon is reduced to Carbon Dioxide and Water.

The pillow immediately absorbs any free oil within the surface water and is capable of absorbing up to 14 times its weight in oil (equivalent to 9 litres). Over a 4 month period we estimate that each standard size pillow has a potential to change + 18 kgs of oil into CO₂ and water.

ADVANTAGES

- . Easily placed in the surface layer of an interceptor or laid in culverts to remove surface oil. Tie to any convenient fixing point.
- . Once in place requires no maintenance other than periodic replacement, (approximately every 6 months).
- . Once the oil bacteria start growing each pillow is capable of degrading in excess of 1,5 kg of oil per week.
- . Non-toxic, contains no hazardous materials.
- . Supports function of natural bacterial flora to digest oil and grease.
- . Reduces significantly the volume of free oil in an interceptor.
- . When source of oil can be predicted, pillow contents can be optimised to deal with expected contamination.
- . Product is safe and requires no haz-chem labelling.
- . Special treatment repels water to give maximum oil absorption.
- . Tough, resilient and very durable.
- . After use each pillow can be disposed of as dry waste.

DOSAGE (related to the influent flow rate)

For flow rates lower than 1 m³/h

- Prior the beginning of the trial, the separator would better be emptied.
- After the separator has been emptied, install 2 TRAVENA OBP in the last but one chamber and 1 TRAVENA OBP in the last chamber of the interceptor.
- Replace OBP units every 4 to 6 months depending on the difficulty of the problem.

For FLOW rates equal to or higher than 1 m³ per hour

Flow rate	dose for a 6 month period last but one chamber	dose for a 6 month period last chamber
1 m ³ /h	20BP	10BP
3 m ³ /h	40BP	20BP
9 m ³ /h	80BP	40BP
etc.

PACKAGING: Box of 10 OBP.

STORAGE AND HANDLING

- Store in a cool dry place.
- Avoid prolonged exposure to temperature exceeding 40°C.
- Avoid eye contact.
- Wash hands thoroughly with warm soapy water after handling.