



THE  
**PÈTROZORB**  
RANGE

TESTED BY:



**SABS**

CONFORMS TO SANS 339

# THE PÈTROZORB RANGE

**PLATINUM****GOLD****SILVER****BRONZE**

Petroleum Hydrocarbon Organic Fibre Absorbents:  
Proudly Manufactured in South Africa. 🇿🇦



## INTRODUCTION

PèTROZORB (pronounced-Peat-Ro-Zorb). The name of a series, of absorbent products. Their characteristics allow for rapid absorption and vapour suppression for petroleum hydrocarbons and hydrophobic chemical spills, on water and land surfaces.

The PèTROZORB Range is a field proven industrial absorbent that is economical and fast acting. Manufactured from 100% all natural forest organic fibres, that is non-abrasive, non-toxic, non-leaching, free flowing, environmentally friendly and economical. In its natural state, is already biodegradable and 100% safe to handle, requires no protective clothing, specialized trained technicians or high tech equipment for handling or disposing of the spent absorbents.

The PèTROZORB Range is used extensively as both an emergency response and every day spill management tool. PèTROZORB will solidify and encapsulate spills on contact, eliminate spill spreading.

PèTROZORB absorbent properties are compatible to those of peat and other imported products, as well as local manufactured absorbents. The product is lightweight and easy to use as well as extremely cost effective. Flammable liquids absorbed will not ignite when exposed to a flame further than 30mm. On application PèTROZORB suppresses vapours and odours, hence minimizing associated risks of proliferation, explosion and combustion.

**The PèTROZORB Range is a uniquely South African manufactured product and is not bound to price fluctuations due to Rand Dollar exchange from imports. We guarantee stock availability and competitive prices across the PèTROZORB Range.**

# PÈTROZORB

## SOME LIQUIDS ABSORBED BY

# THE **PèTROZORB** RANGE

Acetone  
Acetonitrile  
Amyl Acetate  
Benzene  
Butanol  
2 - Butanone  
Bromodichloromethane  
Bromoform  
Bunker C  
Canola Oil  
Carbon Disulfide  
Carbon Tetrachloride  
Chloroform  
Chloromethane  
Corn Oil  
Cutting Oils  
Cyclohexane  
Dichlorobenzene  
Dichloromethane  
1, 2 - Dichloroethylene  
Diesel Fuels  
Ethanol  
Ethylbenzene  
Ethyl Ether  
Gasoline

Heptane  
Hexane  
Hexachlorobenzene  
Hexachlorobutadiene  
Hexachloroethane  
Hexene  
Isobutanol  
Isopropanol  
Jet Fuels  
Kerosene  
Methanol  
Methylene Chloride  
Methyl. Ethyl Ketone  
Methylphenol  
Motor Oils  
Naphthalene  
2 - Nitroaniline  
Nitrobenzene  
Oil Base Paint  
Oil Base Ink  
Oil Base Drilling Fluids  
Paraffin Oil

Pentane  
Pentacilopilenol  
Phenol  
Propanol  
48% in Acetone  
Scintillation Liquid  
Silicone Oil (100 cs)  
Styrene  
Tetrachloroethane  
Tetrachloroethylene  
Tetrahydrofuran  
Toluene  
Trichloroethylene  
Trichlorophenol  
Varsol  
Vinyl Acetate  
Vinyl Chloride  
Xylenes



Absorption ratings will vary depending upon uniformity, composition and the specific gravity of liquids to be absorbed. Outside temperatures and the viscosity of the hydrocarbon and chemicals to be absorbed will vary from the amount of product that will be necessary to fully absorb each spill.

### DISPOSAL METHODS:

- **INCINERATION** – Many coal generated fossil fuel plants could use absorbed product saturated with hydrocarbon in their manufacturing process. This makes it an excellent alternative fuel.
- **LANDFILL** – In accordance with regulatory authority guidelines. Landfill will not allow encapsulated hydrocarbons to escape into the environment. This is of great value to companies with an environmental conscious agenda, since the product range is natural organic absorbent containing no chemicals or other additives.
- **LAND FARMING** – Bioremediation saves valuable landfill space. Reclaim once unsalvageable soils. Hydrocarbons will biodegrade 25% faster. The hydrocarbon will become nutrients for the Oil Eating Microbes (OEM ) rehabilitating the soil. Once land farming has encapsulated the hydrocarbon it will not release it into the environment.

# PèTROZORB

## With Oil Eating Microbes (OEM)

Our bioremediation products contain natural (native) occurring as well as added non native microbiology, all the macro and micro elements (nutrients) to support life in soil and facilitate bioremediation. These nutrients sustain the micro organisms found in PÈTROZORB Microbial Activity (OEM) products and provide the basis for them to proliferate in an otherwise sterile environment. Hence, these micro-organisms metabolize hydrocarbons, stimulate and enhance new plant growth.

The above properties enable PÈTROZORB Microbial Activity (OEM) to offer a perfectly balanced solution. When an oil or chemical spill occurs the land is effectively sterilized and is rendered free of all life and nutrients. PÈTROZORB Microbial Activity (OEM) products encapsulate the pollutant, restore micro-organisms to the soil and supply them with all the nutrients necessary to sustain them and enable them to rapidly multiply. These micro-organisms then feed on and break down the hydrocarbons, thus replenishing the earth and renewal of plant growth.

### Added non-native microbial activity conformity

- Our biological non-native microbes are manufactured in a facility, which has been registered to ISO 9002 standards. Tight controls and stringent tests are incorporated into the production process to ensure that the products are manufactured to the highest quality standards.
- The micro-organisms/Strains in our microbial active products belong to Class I as defined in the Center for Disease Control (CDC). <http://www.cdc.gov/od/ohs/symp5/jyrtext1.htm>

This Group consists of biological agents that pose low individual and community risk and are highly unlikely to cause disease in healthy workers or animals. The agents require Bio-safety Level 1 containment.

- Our added microbial products are listed on the U.S. EPA NCPP list for over 15yrs.
- The strains are naturally occurring and are not genetically engineered or modified.
- Strains are sent on a regular basis to an independent body for verification of identification and classification. Strains are also deposited in culture banks at American Type Culture Collection (ATCC).
- Finished products are tested using procedures recommended by the USDA, NSF and AOAC to ensure that they are free of gram negatives, salmonella and shigella.



### Oil Eating Microbes (OEM)

1.35 x 10<sup>8</sup> CFU/g ( Colony Forming Units ) added per 10kg  
 PÈTROZORB Platinum & Silver

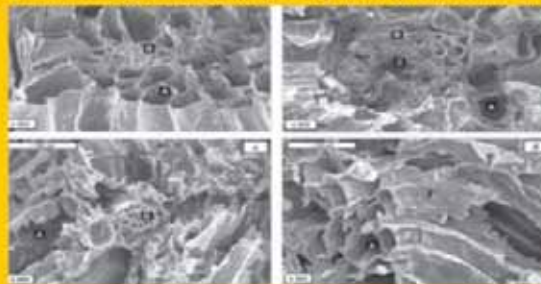
## PLATINUM

Manufactured with 100% renewable resources, a cellulose organic fibre with added Oil Eating Microbes (OEM) A very significant advantage of PèTROZORB Platinum over conventional oil absorption substances is that it is 100% bio-degradable.

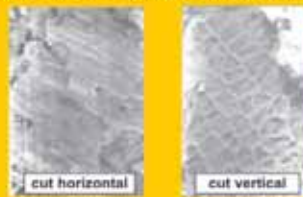
PèTROZORB Platinum has a natural ability to easily and quickly absorb spillages by using its oleophilic qualities to reduce the mess to a clean, safe & workable area again. The key to the success of the PèTROZORB Platinum is the unique box like molecular structure of every Crum sized speck of the fibre. This presents a huge surface tension area with capillary action to absorb oils and other liquids into its cellular structure, whilst retaining non skid ability.

The structure permits a 36% Air Filled Porosity (AFP) that allows it to float on any liquid to be absorbed. Will act immediately on contact, absorb 90% of its capacity in the first few minutes, which is critical for a quick response clean up. The product will continue to absorb over a long period and not allow any leach-back.

Electron Microscope Picture 3,000 magnified of molecular structure



Millions of capillary micro - sponges allows for rapid absorption



PèTROZORB Platinum may be utilized to clean up oil spills not only on hard surfaces, such as highways, concrete slabs and soil, but also upon surfaces of water. PèTROZORB Platinum floats on water, it will absorb oil in preference to water and remains afloat even when saturated with oil, without changing its molecular structure PèTROZORB Platinum absorbs oils, coolants, solvents and other oily materials that float on water. An additional advantage is that it retains its consistency, even when spread on water and saturated with oil.

Once saturated with oil it will not turn to "mush". This feature allows the oil saturated product to be scooped or raked from the surface of water without great difficulty. Loose absorbent weight 10-30Kg can absorb 150-465 liters depending on viscosity of the liquid absorbed.

PèTROZORB Platinum is entirely non-toxic. It is light in weight and creates very little dust even when thrown a considerable distance onto a hard surface from which oil is to be absorbed. Saturated product could be roller pressed to recover up to 75% of oil, if filtered and collected in a receptacle. Once absorbed hydrocarbons have been pressed out, the remaining product could be re-used about up to three times.

## GOLD

Same characteristics, advantages and features as PèTROZORB Platinum  
- **WITHOUT** the Oil Eating Microbes (OEM)

## SILVER

A field proven industrial absorbent that is economical and fast acting. Manufactured from 100% all natural fine forest organic & cellulose fibres, with added Oil Eating Microbes (OEM) that is non-abrasive, non-toxic, non-leaching and environmentally friendly. In its natural state is already biodegradable and 100% safe to handle, requires no protective clothing, specialized trained technicians or high tech equipment for handling or disposing of the spent absorbents.

A blend of 5 different plant types, that once blended becomes non-abrasive and is self re-generating. When disposed for bioremediation, it does not change its structure, or release the encapsulated hydrocarbons back into the environment as in the case of sunflower husks, saw dust, paper, straw, clay, or certain cotton base products.

Its absorbency is based on its highly porous ultra structure together with its surface properties, which enhances its affinity for hydrophobic substances. The physical structure of the matrix of capillaries, allows the product to absorb hydrocarbons, allowing the pollutant to remain within the product without leaching. Even traps flammable fumes, assisting with fire control at spills.

## BRONZE

Same characteristics, advantages and features as PÈTROZORB Silver - **WITHOUT** the Oil Eating Microbes (OEM)

### SIMPLE TO USE AND CLEAN



- ① Identify and isolate spill. Always follow workplace procedures for clean-up and disposal.



- ② Block off drains with boom preventing migrating liquids entering the storm water drains.



- ③ Apply absorbent to the perimeter of the spill to form a bund and stop spill migration.



- ④ Continue to apply absorbent working to the centre until spill is completely covered and no free liquid is visible.



- ⑤ Sweep with a hard bristle broom working dry absorbent over spill area to remove all surface oil. Dispose of in accordance with local regulations.

#### Cut-away view of Boom



The nature & design of the organic PÈTROZORB absorbent boom provides increased surface contact to trap migrating liquids. A strong wicking action maximizes the absorption away from the surface which is evenly distributed throughout the boom, preventing leakage underneath.

## Advantages of the Range

- Absorbs hydrocarbons quickly with its capillary action and porous structure.
- Completely safe and easy to use.
- Choice of WITH or WITHOUT the Oil Eating Microbes (OEM)
- Economical and cost effective.
- Easy to apply, easy to clean up.
- Encapsulates (Absorb) hydrocarbons, including PCB's- on contact- taking up the hydrocarbon, rather than allowing the hydrocarbon to attach (Adsorb) to the outer surface of the product.
- High moisture holding content.
- Is affective on land or water.
- Leaves behind no messy residue after clean up.
- Light weight, very little dust.
- Non toxic, 100% biodegradable natural substance.
- Preference more to hydrocarbons than water.
- Re-usable. (Platinum & Gold)
- Reaction time instant.
- Reduces man-hours required for clean ups.
- Removes all free oils from spill sites upon extraction.
- Safe for the environment, non-toxic and completely bio-degradable.
- Suppresses volatile vapours.

## Ideal For

- Airports
- All types of Petroleum Spills
- Construction / Mining Vehicle Repair Shops
- Contingency Operations
- Emergency Spill Response
- Field Service Trucks
- Fuel Depots Inland
- Heavy Equipment Plants
- Hydraulic Equipment Plants
- Leaky Compressors
- Leaky Pumps and Motors
- Machine Shops
- Machinery
- Maintenance Areas
- Mining Sites
- Oil Containment Areas
- Oil Storage Areas
- On Highways Surfaces / Accidents
- Outdoor Containment Area
- Ports / Marinas
- Refineries and Oil Exploration Sites
- Refueling Areas
- Road Spills
- Service Stations / Forecourts
- Site Clean Ups
- Skim Oil on Water
- Spills on Elevated Areas
- Underground Mining
- Vehicle Repair Shops

## Product Available

- PèTROZORB Absorbents **PLATINUM** **GOLD** **SILVER** **BRONZE**
- Wheelie Bin Spill Kits & Vehicle Spill Kits
- Biological, Bioremediation & Microbial Products
- Booms, Socks, Pillows (available in various lengths & sizes)
- Polypropylene Absorbent Pads and Rolls
- Spark Proof Shovels – Short & Long Shafts
- Recovery & Safe Disposal Bags (160 microns anti-static)
- 240L Plastic Wheelie Bins in various colours
- Environmental Friendly Biodegradable Degreaser – **“FAT OFF”**

**Absorbent range can be custom branded for individual company needs.**

## Item No. 1: Industrial Hydrocarbon & Chemical Absorbent



- 10Kg PÈTROZORB – Bronze & Silver
- 10Kg PÈTROZORB – Gold & Platinum
- Option: with or without Oil Eating Microbes (OEM)

## Item No. 2: Wheelie Bin Spill Kit

- 1 x 240L Wheelie Bin Yellow
- 3 x 10Kg PÈTROZORB - Bronze
- 3 x 1m x 125mm Spill Boom
- 3 x 400mm x 400mm Spill Pillows
- 1 x Spark Proof Shovel
- 1 x Hard Bristle Broom
- 1 x Dustpan & Brush
- 1 x Safety Goggles
- 1 x Pair PVC Gloves
- 1 x Dust Mask
- 5 x Disposable Bags 160micron (with bag ties)
- 2 x Labels (spill procedures & identification)



## Item No.3: Truck, Vehicle, Forklift Spill Kit



- 1 x Yellow PVC Carry Bag
- 4 x 1kg PÈTROZORB Bronze – Absorbent
- 5 x Disposable bags 160micron (with bag ties)
- 1 x Dustpan & Brush
- 1 x Pair PVC Gloves
- 1 x Safety Goggles
- 1 x Dust Mask

Note: Item no 2 & 3 can be custom made up to suit client requirements.

## Item No.4: Spark Proof Shovels

- Short Shaft - T grip handle 2kg
- Long Shaft - Extended grip 2'5kg

