



# MARLYN

## Product Information Sheet

### Activated Carbon

Marlyn is a leading supplier of activated carbon to the mining and mineral industry in Southern Africa. Activated carbon is a form of carbon that is activated by a carefully controlled oxidation process to develop a porous carbon structure. The imperfect structure results in a high degree of porosity and over a broad range of pore sizes, from visible cracks and crevices to gaps and voids of molecular dimensions. The specified structure of carbon gives it a very large surface area which allows the carbon to adsorb a wide range of compounds. Activated carbon has the highest volume of adsorbing porosity of any material available to mankind.

Meticulous quality control has been implemented throughout the activated carbon manufacturing process, from the selection of the raw material to final quality assurance prior to dispatch. Each batch received at Marlyn is then re-checked to ensure that the activated carbon quality is compliant with the customer's specific requirements.

### Coconut Based Activated Carbon

The raw material for coconut based activated carbon is sourced from South India where there is an abundant supply of the material. State of the art equipment and technology is used to produce steam activated carbon from the coconut shell. The coconut based activated carbon has specific application for the recovery of precious metals and the adsorption of trace minerals from mine tailings.

Marlyn has coconut based activated carbon available in variety of mesh sizes (ASTM D2867). The most commonly used mesh sizes for the gold industry are:

USS 6x12	(3.35mm – 1.7mm)
USS 8x16	(2.36mm – 1.18mm)

### Coal Based Activated Carbon

Coal based activated carbon originates from coal that has undergone a steam activation process. During activation, millions of pores are created on the surface of the carbon, increasing the total surface area. Coal based carbon has mainly meso-pores and macro-pores and is very popular in gas phase purification, potable water purification, wastewater purification and aquarium/pond water purification applications.



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## Wood Based Activated Carbon

Wood based activated carbon offers an ideal solution for the removal of undesirable colours and odours from chemicals, beverages, acids and industrial water. This form of activated carbon is manufactured by steam activation using carefully selected sawdust charcoal from various tropical wood species as the base material. The Marlyn activated carbon owes its great adsorption powers to the large internal surface area, which varies from 800 to 1 200 m<sup>2</sup>/g depending on the grade.

Our highly qualified technical representatives will complete thorough due diligence and pre-testing, on site and/or in our laboratories, to ensure that the optimum activated carbon product is recommended and implemented for the specific requirements of the customer.

## Packaging

The activated carbon is available in 25 and 500 kilogram bags. The product must be stored tightly closed in a well ventilated and dry warehouse in secure packaging which precludes moisture and atmospheric contaminants. Further Storage, Handling and Transportation information may be obtained from the Material Safety Data Sheet.

## Health and Safety Information

Wet activated carbon selectively depletes oxygen from air. When entering even partially enclosed areas containing activated carbon, the oxygen levels must be determined, adequate precautions exercised and appropriate protective equipment used if necessary. Refer to the Material Safety Data Sheet for further information on the Health and Safety Information of Activated Carbon.