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CEGEOGTECH

Centre of Excellence Geopolymer and Green Technology

UNIVERSITI MALAYSIA PERLIS

SPIDER PLANT CO FILTER

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PROBLEM STATEMENT

Carbon monoxide (CO) is a colorless, odorless, poisonous gas, a product of incomplete burning of hydrocarbon-based fuels. Carbon monoxide consists of a single carbon atom and a single oxygen atom linked together (CO), the product of incomplete combustion of fuel. Most CO is produced when air-to-fuel ratios are too low in the engine during vehicle starting, when cars are not tuned properly, and at higher altitudes, where thin air reduces the amount of oxygen available for combustion. Two-thirds of the carbon monoxide emissions come from transportation sources, with the largest contribution coming from cars.

PRODUCT DESCRIPTION

Spider Plant CO Filter has developed to become an effective filter of the CO especially in transportation and factory smog outlet. Beside CO the filter is also capable to absorb and filter a smog from the combustion.

NOVELTY / INVENTION

Produce better quality of the transportation and the factory smog outlet to the environment by using a nature based, renewable and recycled materials.

MAJOR ADVANTAGES OF PRODUCT

- Cheap and renewable resources
- Act as absorb and filter
- Nature based materials
- Can be used together with recycled paper fiber



FIGURE: SPIDER PLANT CO FILTER SHEET

TECHNICAL DATA

Technical Data

Percentage of CO in car exhaust gas	CO absorbtion
1000 rpm	
Without Filter	0.752 %
With Spider Plant filter	0.738 %
1500 rpm	
Without Filter	0.829 %
With Spider Plant filter	0.690 %
2000 rpm	
Without Filter	0.603 %
With Spider Plant filter	0.537 %
3000 rpm	
Without Filter	0.609 %
With Spider Plant filter	0.567 %

COMMERCIALIZATION

This product is in research negotiation with PERODUA, PROTON and other Automotive company.

