

# Pollution Filter Masks

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The world we live in is surrounded by a layer of contaminated grime and toxic agents which slowly but surely chip away at our immune system. These pollutants hold us back from a successful and happy future. To remedy this issue so far few steps have been taken if at all out of which the most prominent are bans on the use of certain grades of fuel whose fumes are highly toxic and search for alternate fuels. However, these bans are implemented only in developed countries and are not followed in the poorer countries that are still in the development phase or are undeveloped. In light of this I have made a mask designed to combat three major pollutants; lead dichloride, nitrogen monoxide, and nitrogen dioxide. Made of polypropylene, based on the framework of the surgeon's mask which has layers to filter out bacteria, dust particles and germs. Coating the layers with sodium hypochlorite and soda lime will stop above mentioned pollutants from entering our body as sodium hypochlorite reacts with lead dichloride to produce reddish brown precipitate of lead dioxide and soda lime absorbs mononitrogen oxides. The aim behind the development of this mask is to eliminate these pollutants from wreaking havoc with our systems by causing Attention Deficit Hyperactive Disorder (ADHD), lead poisoning, stunted growth, mental retardation, congenital abnormalities, worsening the effects of respiratory diseases such as emphysema and bronchitis, further aggravating cardiac diseases and may even lead to death. This can be done only by curbing the problem at its root i.e. preventing the entrance of lead dichloride and mononitrogen oxides in our body as is the mechanism of this mask.