AIR PURIFICATION

"You must squeeze every atom of impure air from lungs until they are almost as free of air as a vacuum." Joseph Pilates

One of the most serious concerns the globe all over is facing is that of the ever rising air pollution which is being caused by all the industries and the growing number of vehicles globally. The haunting facts and figures of the recent surveys being conducted show an alarming rate of increase of the harmful gases in the air which are causing severe medical problems to people of all ages. In the survey of "Solution to pollution" globally quite a few new numbers of pollutants have been discovered and hence more rigorous and stringent laws are being placed with an aim of curbing the menace caused by them.

ACTIVE CARBON THE REGENERATOR OF CLEAN AIR

One of the oldest and probably the most effective solutions to this ever raising menace is that of activated carbon. Activated carbon acts as a lease of fresh life towards the regeneration of pure and healthy dirt free air that helps get rid of unwanted and hazardous toxic volatile compounds. It cleans up the cabin air in flights, harmful toxic wastes from the industries and also the poisonous chemicals from the outlet of the vehicles.

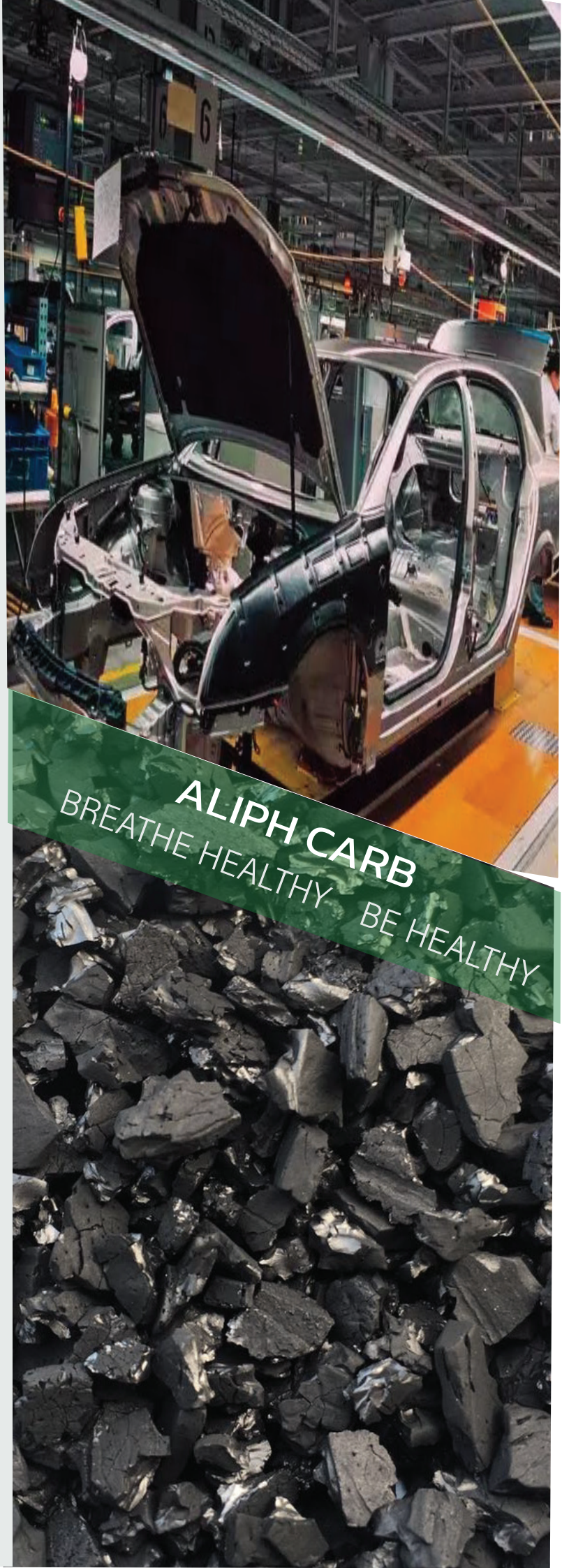
Air pollution in the automotive industry

One of the main factors influencing air pollution in automotive production is the generation of volatile organic compounds (VOCs) during the painting process. Automotive production being the production of cars, trucks, vans and busses. Several initiatives in that industry lead to reduction of these emissions during the last decades. The introduction of water-based paints in the 1990s. Recent introduction of UV paints, where UV light is used for hardening the paint, further reduced the emissions.

UV paints – An environmentally friendly and cost-efficient alternative

In the industrial use of UV hardening systems, radically hardening acrylic paints have become the norm. Radically hardening UV paints contain unsaturated, polyfunctional acrylic resins as a binding agent, as well as mono or difunctional acrylates as a reactive paint thinner that acts as a solvent to regulate viscosity of the paint.

By using polymerisable reactive thinners, users can generally do without organic solvents when working with UV paints, which means they are an environmentally friendly and cost-efficient alternative to conventional painting systems, where up to 50% of the paint components simply evaporate in the hardening process. The use of UV paints do implicate the emission of acrylate odours however, which can be removed with an activated carbon purification system.



“A century ago, petroleum what we call oil was just an obscure commodity; today it is almost as vital to human existence as water.” James Buchan

We at Aliph Carbon have spent alot of time in the research work of coming up with modified activated carbon that can cater to the petrochemical and oil industries. Lately there has been a rise in the demands in this particular sector because of the fact that loads of pollution is being caused due to the high content of carbon emissions which is reduced to a large extent by using activated carbon.

APPLICATION IN OIL AND GAS INDUSTRY

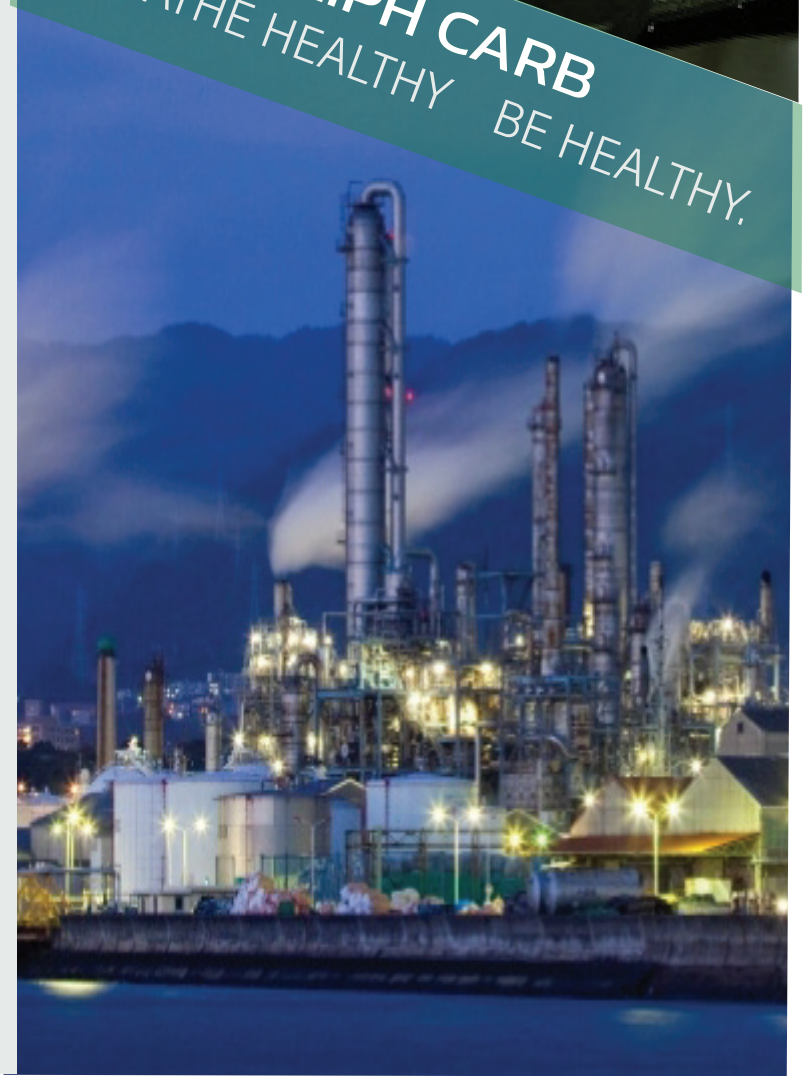
Filters with activated carbon are usually used in compressed air and gas purification to remove oil vapors, odor, and other hydrocarbons from the air. The most common designs use a 1-stage or 2 stage filtration principle in which activated carbon is embedded inside the filter media. Activated carbon is also used in spacesuit Primary Life Support Systems.

Activated carbon filters are used to retain radioactive gases within the air vacuumed from a nuclear boiling water reactor turbine condenser. The large charcoal beds absorb these gases and retain them while they rapidly decay to non-radioactive solid species. The solids are trapped in the charcoal particles, while the filtered air passes through. Shell based active carbons are used to purify amines and glycol solutions, which in turn are used in scrubber gases to remove vapour from natural gas.

It also helps removal of VOC (Volatile Organic Compounds) and traces of mercury found in the natural gas reserves. Lastly but not the least active carbon is also used in the decolouration and deodorization of oil and petrochemicals.

ALIPH CARB

BREATHE HEALTHY BE HEALTHY.



Carbon Grades for Air & Gas Phase Applications :

The below products are typically used in Air and Gas Phase applications for Treatment of odours, Industrial air filtration, Exhaust fumes removal, Industrial and Chemical processing.

Grade	Aliph Carb Product Name	Moisture	Apparent Density	CTC	Ash	pH	Hardness
ASTM 2862		ASTM 2867	ASTM 2854	ASTM 3467	ASTM 2866	ASTM 3838	ASTM 3802
3 x 6	AC 3x6	5% max	0.45 to 0.55 g/cc	50/55/60	3% max	9 to 11	98% min
1/4 x 6	AC 1/4x6	5% max	0.45 to 0.55 g/cc	50/55/60	3% max	9 to 11	98% min
4 x 8	AC 4x8	5% max	0.45 to 0.55 g/cc	50/55/60	3% max	9 to 11	98% min
4 x 10	AC 4x10	5% max	0.45 to 0.55 g/cc	50/55/60	3% max	9 to 11	98% min

ASTM STANDARDS
Testing Procedure

Analysis	ASTM Standards
Particle size distribution	D 2862
Moisure (%)	D 2867
Butane adsoprtion (%)	D 5742
Iodine Value (mg/g)	D 4607
Ash (%)	D 2866
pH	D 3838
Hardness	D 3802

ALIPH CARB

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