



Light Rail (UK)
Warrington, Cheshire, England, United Kingdom.
Tel (+44) (0)1925 740675 07721378223
www.applrguk.co.uk e-mail jimh@jimmyharkins.com



Tyre wear produces 1,000 times MORE harmful pollution than car exhausts

Car tyres could be doing more damage to our health than the fumes from exhaust pipes, according to the results from a new test.

Measurements found that 5.8 grams per kilometre of harmful particles are emitted by tyres as they wear when a car is being driven. That compares to 4.5 milligrams per kilometre produced from exhaust pipes of the latest vehicles on sale today – meaning harmful tyre outputs are higher by a factor of over 1,000.

Assessments were conducted by UK-based experts Emissions Analytics, which specialises in calculating the pollution produced by cars in real-world driving. The type of emissions tyres have been found to produce is harmful particulate matter that is almost impossible to see with the naked eye. It's made up of microscopic solids or liquid droplets that are so small that they can be inhaled and cause serious health problems.

Particles less than 2.5 micrometres in diameter – also known as PM2.5 – pose the greatest risk to our health. Exposure can affect both the lungs and heart, with numerous scientific studies linking them to a variety of problems.

This includes premature death in people with heart or lung disease, nonfatal heart attacks, irregular heartbeat, aggravated asthma, decreased lung function and wider respiratory symptoms.

To understand the volume being produced, Emissions Analytics performed some initial wear tests using a popular family hatchback running on brand new – correctly inflated – tyres. Alarming, the results showed that particulate matter created from the impact of rubber against tarmac was, in some cases, over 1,000 times higher than what comes out from the exhaust of a new vehicle.

It warned that this could have been even higher if the car had tyres which were under inflated, or the road surfaces used for the test were rougher, or the tyres used were from a budget range – all of which are likely scenarios in the real world.

Richard Lofthouse, senior researcher at the vehicle testing group, said: 'It's time to consider not just what comes out of a car's exhaust pipe but particle pollution from tyre and brake wear. 'Our initial tests reveal that there can be a shocking amount of particle pollution from tyres – 1,000 times worse than emissions from a car's exhaust.'



Light Rail (UK)
Warrington, Cheshire, England, United Kingdom.
Tel (+44) (0)1925 740675 07721378223
www.applrguk.co.uk e-mail jimh@jimmyharkins.com



Currently, vehicle tyre wear pollution (NEE) is completely unregulated – unlike exhaust emissions which have been rapidly reduced by car makers thanks to the pressure placed on them by European emissions standards.

New cars now emit very little in the way of exhaust particulate matter (partly thanks to diesel particulate filters) but there is growing concern about the ‘non-exhaust emissions’ (NEE) released into the air from brake wear, tyre wear and road surface wear.

‘What is even more frightening is that while exhaust emissions have been tightly regulated for many years, tyre wear is totally unregulated – and with the increasing growth in sales of heavier SUVs and battery-powered electric cars, non-exhaust emissions are a very serious problem,’ Lofthouse added. NEEs are currently believed to constitute most of the primary particulate matter from road transport.

In a report released last year, the Government’s Air Quality Expert Group recommended that NEE are immediately recognised as a source of ambient concentrations of airborne particulate matter, even for vehicles with zero exhaust emissions of particles – such as electric cars.

Nick Molden, CEO of Emissions Analytics added: ‘The challenge to the industry and regulators is an almost complete black hole of consumer information, undone by frankly out of date regulations still preoccupied with exhaust emissions.

‘In the short term, fitting higher quality tyres is one way to reduce these NEEs and to always have tyres inflated to the correct level.’

Molden went on to say that responsibility also lies with the car industry to find ways to reduce vehicle weight to lessen the impact of tyre wear and the resulting emissions.

‘What is without doubt on the horizon is much-needed regulation to combat this problem,’ he added. ‘Whether that leads to specific types of low emission, harder wearing tyres is not for us to say – but change has to come.’

SMMT chief executive Mike Hawes blasted Emissions Analytics’ research as sensationalist and irresponsible.

Criticising the report, he said: ‘Making sensationalist claims based on testing of a single vehicle is not credible and, quite frankly, irresponsible.

‘Emissions from safety-critical brakes, tyres and road surfaces are very difficult to measure, and a challenge already taken seriously by the sector, governments and a UN global group, which are working together to better understand, and agree, how to test them in a scientific way.

‘Further, there is no evidence to suggest that electric vehicles have a propensity to emit more non-exhaust particulates than any other – in fact, their regenerative braking systems mean wear is significantly reduced.’



Light Rail (UK)
Warrington, Cheshire, England, United Kingdom.
Tel (+44) (0)1925 740675 07721378223
www.applrguk.co.uk e-mail jimh@jimmyharkins.com



The DEFRA Air Quality Report July 2019 confirms that EV are generally 24% heavier with 37% and when using traditional braking systems create more NEE.

“Students at Imperial College London have invented a device that attaches close to the wheels of a car and is claimed to collect up to 60% of airborne tyre particles before they enter the atmosphere. The researchers from the European Society of Cardiology have estimated that globally, air pollution causes an extra 8.8 million premature deaths each year

Tyre Rubber Trapping Equipment [www.applrguk.co.uk/Latest-news/Part of the Pollution, partial answer!](http://www.applrguk.co.uk/Latest-news/Part%20of%20the%20Pollution,%20partial%20answer!)

Courtesy: applrguk

Earlier this week, Goodyear unveiled a concept car tyre that can regenerate its own tread.

The Recharge tyre has a biodegradable tread that can regenerate thanks to a special liquid compound made from a biological material and reinforced with fibres inspired by spider silk – one of the toughest natural materials in the world.

Drivers will be able to ‘recharge’ their tyres by inserting a capsule containing this liquid compound it into the centre of the wheel.

Courtesy: *BY BRINKWIRE/EMMISSIONS ANALYTICS ON MARCH 6, 2020*

Media contact For all media inquiries please contact Sam Hardy on +44 (0)7815 863968, or via media@emissionsanalytics.com

About Emissions Analytics

Emissions Analytics is the leading independent global testing and data specialist for the scientific measurement of real-world emissions and fuel efficiency for passenger and commercial vehicles and non-road mobile machinery. Emissions Analytics seeks to bring transparency to a confused market sector. It publishes the EQUA Index of real-world driving emissions, and works with clients around the world to establish accurate emissions measurement and data requirements