Aroma Chemistry

THE AROMA OF NEW CARS

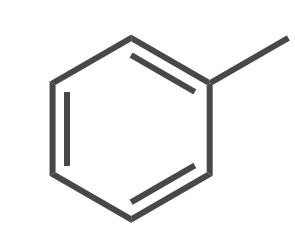
60+

The approximate number of volatile organic compounds (VOCs) detected in the interior of new cars. Not all of these will have odours, but many may be contributors to the characteristic 'new car smell', so it's not the result of one specific compound.

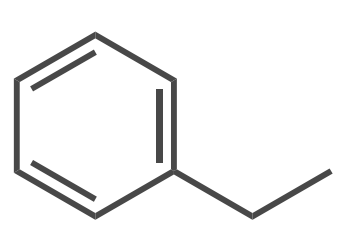
The approximate percentage decay of total VOC levels per week in new car interiors. They can also vary depending on conditions - concentrations will be decreased by ventilation of the car, but can be increased by increased temperatures within the car.

20%

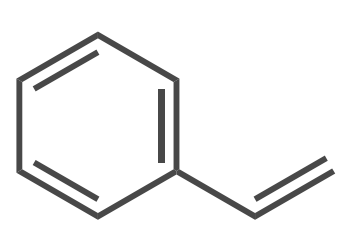
THE MOST COMMONLY FOUND COMPOUNDS



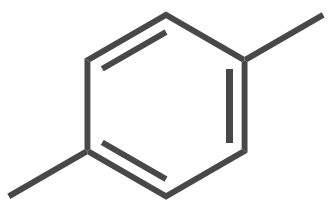
TOLUENE

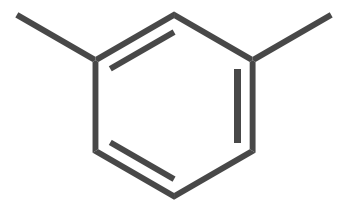


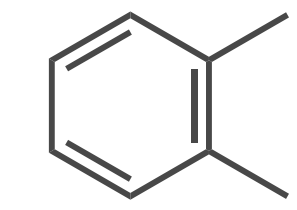
ETHYLBENZENE



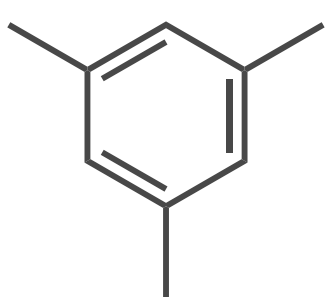
STYRENE

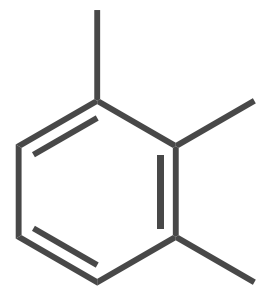


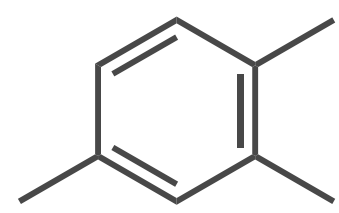




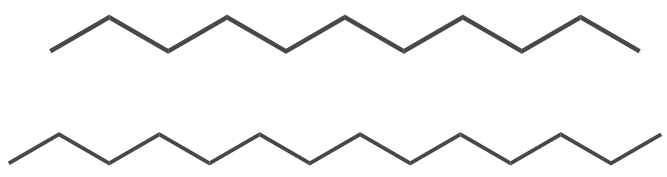
XYLENES (p-XYLENE, m-XYLENE AND o-XYLENE)







TRIMETHYLBENZENES (1,3,5-, 1,2,3- AND 1,2,4-TRIMETHYLBENZENE



VARIOUS ALKANES

WHERE DO THEY COME FROM?

PLASTIC MOLDINGS CARPET
UPHOLSTERY ADHESIVES
LUBRICANTS GASOLINE
LEATHER & VINYL TREATMENTS

ARE THEY HARMFUL?

A 2007 study found little toxicity in new car odours under lab conditions. However, although concentrations of these compounds are still very low, they can be above recommended indoor guidelines for VOCs for the first 6 months after a car's manufacture. This could lead to headaches, sensory irritations and minor allergic responses. Manufacturers are now taking measures to reduce the levels of these compounds in new cars.