



Interesting Facts about Methanol

Methanol M99 – the new universal fuel as a substitute for all previous 14 fossil heating and automotive fuels in Switzerland

Synthetically manufactured methanol is currently the second most traded liquid in the world after crude oil. It is used in many products, such as primarily in pharmaceuticals and cosmetics. Despite its toxicity (like all alcohols), methanol is less harmful than petrol.

China, Qatar and Trinidad are the major producers of methanol today. Our aim is to produce methanol synthetically from water, CO₂ from the atmosphere and electric current. Unlike the fossil fuels oil, natural gas or coal, these elements are available in “unlimited quantities.” Methanol with only one carbon atom is the alcohol with the simplest molecular structure. The next highest with two carbon atoms is ethanol, the ordinary drinking alcohol. Since the production of methanol does not require agricultural cropland, its manufacture does not compete with food production.

In the methanol M99 of Silent Power, the number 99 stands for at least 99% purity. M99 has combustion properties similar to those of petrol, diesel or kerosene, but burns residue-free and clean with an almost colourless flame. Since M99 is biodegradable, it is probably one of the safest fuels. During the combustion process it is again broken down into its original components: the non-toxic gas CO₂ and water. Like methylated spirits, M99 is a colourless liquid that can also be easily stored and transported over a long period without signs of decomposition or loss.

Methanol can already be purchased today from retailers, DIY centres, or chemists. The methanol industry is very economical as it can cover all conceivable applications with only one single type of fuel: For the generation of electric current, heating and cooling of buildings, cooking and mobility, M99 can power lawn mowers, leaf blowers, e-bikes, motorcycles, cars, buses, harvesters, construction machinery, and even aircrafts and ships. Retrofitting the infrastructure from petrol, diesel or kerosene to methanol is simple and inexpensive. The current transport vessels, warehouses, petrol stations, and tank lorries can be used and adapted easily.

Methanol as a universal source of energy requires only a single distribution system, unlike currently available electric power and gas lines, logistics for oil heating units and petrol station networks for vehicles.

Methanol offers further advantages: It does not generate secondary costs and damage (acid rain, polluted beaches due to tanker accidents, etc.) for society; it does not require catalytic converters as used in today's piston engines and it does not need smokestacks because the waste consists only of water and the non-toxic CO₂ gas. M99 does not require any hazardous additives such as benzene, currently added to petrol and diesel to improve the combustion process. Benzene is dangerous because it can cause blood cancer (leukaemia).

Literature: Georg A. Olah (Nobel Prize Award 1994 in Chemistry), Beyond Oil and Gas – The Methanol Economy, Wiley-VCH 2006.

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