



MAXSORB® for PFAS removal

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Kansai Coke and Chemicals Co., Ltd. ("KCC") has developed activated carbon that has excellent quality in adsorption and removal of PFAS (per- and polyfluoroalkyl substances) in water.

It is about 10 times more effective on PFOS (perfluorooctanesulfonic acid), and about 30 times more effective on PFOA (perfluorooctanoic acid), than conventional coconut shell-based activated carbons.

PFAS has been used for various daily necessities (frying pans, waterproof sprays, etc.) and defoamers at airports and military bases due to the advantage of its properties.

However, it easily remains in the environment because of its extremely stable chemical structure. As a result, due to bioaccumulation it is recognized as a health hazard, and therefore regulations are being tightened mainly in Europe and the United States.

In addition, the production and use of PFAS in Japan has been regulated, and provisional targets for tap water and river water quality have been in effect since April 2020.

PFAS can be adsorbed and removed to some extent even with common coconut shell-based activated carbons in the market, but **KCC has succeeded in enhancing the interaction with PFAS and improving its removal performance with a special grade of MAXSORB® (carbon fiber-based alkaline activated carbon with specific surface area).**

Furthermore, it has been confirmed that the material has a higher performance of removing residual chlorine in tap water than coconut shell-based activated carbons.

KCC's alkaline activated carbon has a specific pore structure different from steam activated carbons, and is characterized by an abundance in fine pores which are effective in adsorbing polar substances.

The large number of active points in the structure is also unique to MAXSORB® and has a big effect on improving capacity of power storage devices.

Regarding the market of adsorption and removal of PFAS, it is expected to expand rapidly with an increase in regulations, and KCC has started introducing it to customers.

Contact information (MC Evolve Technologies' WEB-SITE):

<https://www.mcet.co.jp/english/contact.html>

※MC Evolve Technologies is an affiliated company of KCC and produces MAXSORB®.