

MINERAL OIL REMOVAL FROM PAPER / PAPERBOARD

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The patented technology applied to the production of food contact paper/paperboard allows to remove mineral oil, whose aromatic fraction is suspected to be cangerogenic.

The paper color is not affected by the silica treatment.

Protection: Europe, USA and China.

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INVENTION

The currently available technologies are able to limit the migration of organic contaminants from paper-based packaging to foodstuff through the application of plastic, aluminum or activated carbon layers on/inside paper/paperboard foils. In all the cases, the technologies need ad hoc paper production chains, while contaminants are not removed from packaging. This technology is able to adsorb and remove toxic contaminants (MOSH) and presumable carcinogenics (MOAH) from paper/paperboard without modifying paper production chains and without altering the cellulose neutral color, using mesoporous silicas at high affinity for mineral oil. The silicas are thermally regenerable and reusable for many production cycles.

ADVANTAGES

- Reduction of MOSH and MOAH content in food contact paper-based packaging;
- Containment of deforestation through the use of recycled paper;
- Low economical impact on the paper production chains;
- Production of natural-colored paper/paperboard.

APPLICATIONS

- Paper industry;
- Printing and food contact paper-based packaging.

CONTACTS

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