

## Technology Offer

# Anti-microbial and anti-mosquito treatments for MDF ideally suited to the tourism & medical-health sectors.

## Summary

*Greek industrial chemicals and treatments expert is offering an innovative and effective technique for applying anti-microbial and anti-mosquito treatments to MDF (Medium Density Fibreboard), particularly targeting the tourism-hospitality sector, as well as for medical and health application. The expert wishes to establish commercial agreements with technical assistance and is particularly interested in finding partners from Asia: South Korea, Taiwan, China.*

**Expiration Date** 03 February 2018

**Reference** TOGR20170202001

**Profile link** <http://een.ec.europa.eu/tools/services/PRO/Profile/Detail/c44a094d-afed-4eee-a55d-7fb9e569b030>

## Details

### Description

This Greek expert has developed a technique for applying an anti-microbial agent to medium density fibreboard (MDF). It can be used for a variety of applications, including household, commercial and industrial products. The treatment is built in to the product at the time of manufacture, and provides anti-microbial and anti-mosquito protection, which lasts for the lifetime of the product.

This technique has so far been applied in selected industries and product types (such as clothing, indoor materials, and outdoor fabrics such as tents). With this technique, developed and tested by the Greek expert, the application can also now be used for other building materials such as MDF.

Methicillin resistant staphylococcus aureus (MRSA) is a form of bacterial infection that is resistant to numerous antibiotics. It is estimated that 49-65% of healthcare-associated infections are caused by MRSA strains. Approximately 86% of all invasive MRSA infections are contracted in hospitals or clinics. Anti-microbial soaps and other products used in intensive care units have been found to reduce MRSA cases by 40%. Foam, plastics, textiles, and wood are susceptible to bacterial and fungal attack. In bedding and upholstery, dust mites can also be a problem, as well as the issue of potentially infectious mosquitos.

The anti-microbial and anti-mosquito agents offered by this technology is built-in to products during the manufacturing process and becomes an intrinsic part of the product, both inside and on the surface. When microbes, such as bacteria, mould and mildew, come into contact with the product surface, the antimicrobial agent penetrates the cell wall of the microbe and disrupts key cell functions so the microbe cannot grow or reproduce. Thus the treatment is particularly well-suited to applications in the medical-health field.

This expert has acquired all the necessary expertise and know-how in order to develop this effective technique, both through academic qualifications (doctorate in colour chemistry), and from working in his specialised field of industrial chemical treatments and applications at an international level for close to 30 years.

The Greek client is interested in setting up commercial agreements with technical assistance with manufacturing partners from Asia: South Korea, Taiwan, China. Through such an agreement, the

partner would be able to differentiate its products from the competitors, offering market advantages, added value and unique selling points.

## Keywords

<b>Technology</b>	02007015	Properties of Materials, Corrosion/Degradation
<b>Market</b>	08001017	Industrial chemicals
<b>NACE</b>	C.20.5.9	Manufacture of other chemical products n.e.c.
	M.72.1.9	Other research and experimental development on natural sciences and engineering

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**Open for EOI :** **Yes** Dissemination to Sector Group Sustainable Construction

**Restrict Dissemination to Specific Countries** China, SouthKorea, Taiwan

## Client

**Type and Size of Organisation** Other **Year Established** 2014 **Turnover** <1M

**Already Engaged in Trans-National Cooperation** Yes **Experience Comments** ISO 22196:2011

**Languages Spoken** English, Greek, French **Client Country** Greece

## Type and Role of Partner Sought

Medium or large-sized manufacturers of medium density fibreboard interested in obtaining this anti-microbial and anti-mosquito know-how and applying the treatment to its products. Ideally, the potential partner would already have customers in the medical-health sector (such as hospitals, clinics) or would be interested in entering this market segment.

**Type & Size** SME 11-50, 51-250 **Partnership** Commercial agreement with technical assistance

