



▼ Because *Aedes* mosquitoes are rampant in close proximity to houses,
 Because *Aedes* mosquitoes do not move around much and those that bite you
 most probably come from your house,
 Because, despite your efforts in the fight against breeding grounds,
 many water pools (veritable paradises for larvae) cannot be destroyed,
 Because there are no efficient vaccines or treatments
 for the diseases transmitted by *Aedes* mosquitoes ... ▼

We created **AGLOSTIC®**, the innovative filter that will simplify your life.
 Individuals, businesses and communities, end your mosquito troubles!



EDITORIAL

Fighting “*Aedes*” mosquitoes is now a worldwide health priority: today, 50% of the human population is exposed to the dengue, chikungunya and yellow fever viruses. Destroying the spawning areas created by human activity is acknowledged as the most efficient method.

In urban areas, one gutter out of two provides a habitat for mosquito larvae and in certain regions (Italy and Metropolitan France) two-thirds of mosquitoes hatch in road drains and the telephone network’s technical rooms. The current available solutions on the market, such as cleaning operations or the use of larvicide granules, are useful and we must ensure the continued existence of these solutions despite the limited efficiency guarantee in the long-term.

In 2012, we accepted the challenge to design a permanent process that prevents mosquitoes from nesting, gives water an unimpeded flow and responds to the industrial feasibility criteria.

Our project’s development required more than three years of study, with the driving principle being the need for quality, results and performance. Our initial objectives have been surpassed since our concept is part of a circular economy and contributes to the economic development of New Caledonia.

Today, the final outcome is the arrival on the market of AGLOSTIC®, the efficient solution to a previously unanswered problem.

AGLOSTIC®, THE INNOVATION AT THE HEART OF OUR BUSINESS

This product consists of a filter made of recycled rubber and a synthetic binder. This mass, which is permeable to air and water, is then moulded to shape. The pre-shaped blocks are then inserted into the destination recipient in order to fit closely to the walls and to seal the gap. The fact that it is permeable means that it serves as a filter and not as a plug, and so allows the recipient to continue performing its original role.

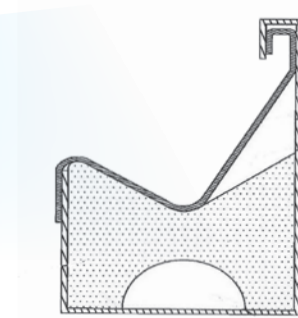


▲ THE PIONEERING TEAM

From left to right: Christophe Put, Fanélie Boucharlat, Thierry Suviri



▲ Sectional view of **PRE-MOULDED MASS** for Caledonian gutters



▲ DIAGRAM OF THE FILTER

inserted in a gutter



▲ **ISLE OF PINES, 2015**
Photo of the device once inserted

COMBINING ECOLOGY AND ECONOMY, HEALTH AND WASTE

Our products contain up to 88% rubber from recycled used tyres, of which the global annual amount is 1.75 billion units.

► Our products will contribute to the reduction of mosquito density and will therefore limit the need for aerial chemical insecticides and their impact on non-targeted fauna.

► L'AGLOSTIC® Manhole, designed to fit road manholes and drains, also has the beneficial effect of blocking at the source all land waste (such as cigarette butts, cigarette packets, plastic wrappers and bottles) that add to marine pollution. AGLOSTIC® Manhole's additional objective, which is currently in development, is to imprison rats, cockroaches and other pests that pollute the underground sanitation network.

► All profits are made in New Caledonia, therefore creating productive jobs in the local economy.

► The New Caledonian dengue outbreak in 2012-2013 cost more than 1.6 billion South Pacific Francs (approximately 14 million Euros; source: DASS-NC [Department of Health and Social Affairs], 2014-2015). Our process, by contributing to the reduction of mosquito populations, will allow for better use of health expenditure.

► For more information:

WWW.AEDES-SYSTEM.NC



▲ RECYCLED GRANULES



▲ AERIAL CHEMICAL INSECTICIDES



▲ GUTTER MAINTENANCE
A dangerous and repetitive chore



▲ THE AEDES MOSQUITO
1 mosquito: several viruses

PERFORMANCE AND EFFICIENCY: THE SCIENTIFIC ANALYSIS

AGLOSTIC® Anti-mosquito barrier

The entomological laboratory analysis, which was carried out by the Institute of Research and Development, the Department of Health and Social Affairs and the New Caledonian Pasteur Institute, shows an efficiency against the spawning of adult *Aedes* mosquitoes of around 99%. Furthermore, AGLOSTIC® also blocks females from passing through, thereby stopping them from laying their eggs in gutters equipped with this device.

Hydro-Mechanical Performance

Whether it be in our Mont-Dore workshops or through practice tests, we devote a large amount of resources to the development of AGLOSTIC® products. The performance requirement is also based on the analysis of material in terms of infiltration speed, mechanical resistance, durability and environmental risks.

These tests were carried out by an independent laboratory, the Mans Centre of Technology Transfer (CTTM), which is a laboratory specialised in mixes of polymers. These results can be seen in the table opposite.

AEDES SYSTEM® INTERNATIONALLY

With an extensive patent portfolio, our innovation may be used around the world, which gives AEDES SYSTEM® proven export potential. We are already partners with ALIAPUR, a national leader in the recycling of used tyres in the French recycled used tyre industry. This eco-business integrated our program into research and development and holds an operating permit for metropolitan France and the French West Indies. Discussions are currently underway with leading New Caledonian businesses who would like to recreate our expertise in Australia, the USA, Polynesia, Fiji and Vanuatu. Finally, our logo can be seen in the Network of European Businesses (EEN), which is a true showcase of innovation in 25 European countries.



▲ **LABORATORY**
8 different designs, 24 replicas,
150 hours of analysis (April and May 2015)



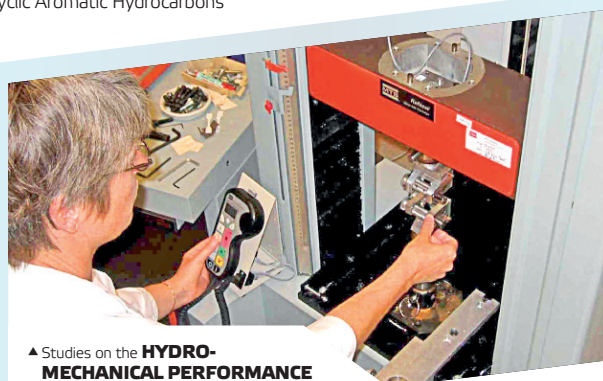
▲ Outside: more than
10,000 LARVAE COLLECTED
in the test gutters against only 294 larvae
in the equipped gutters (April to July 2015)

TRIALS	METHOD	REQUIREMENTS	RESULTS	STANDARD
Permeability		≥4.5 litres/m ² /min	✓	Dtu 60.11
Resistance to compression		≥0.12 MPa ⁽¹⁾	4.18 MPa	
Durability	▶ Ageing under hot water	▶ No disintegration ▶ No changes in dimensions	✓	EN 13744
Seal	▶ Industrial dust ▶ Plant debris	▶ Minimal loss of permeability	✓ ⁽²⁾	
Reject analysis	▶ PAH Research ⁽³⁾	▶ Order of 6 February 2007	✓	ISO 17993

① 0.12 MPa is the value of extruded polystyrene, an identified material presenting a compression resistance that is sufficient for our use

② On wet mud

③ Polycyclic Aromatic Hydrocarbons



▲ Studies on the **HYDRO-MECHANICAL PERFORMANCE**
carried out by the CTTM in Mans