

TESALYS « VIRUS + » PROGRAM

DOUBLE SECURITY AGAINST VIRUSES

Most of the recent and deadly epidemic outbreaks (Covid-19, SARS, MERS, AIDS, Ebola, ...) are caused by viruses.

In response to the Covid-19 outbreak, Tesalys has developed a special infectious waste treatment program with a double security for the elimination of viruses.

In the « Virus + » program, viruses are eliminated with an additional pre-decontamination phase at 85°C for 15 min, providing double security to the standard sterilization cycles.

The « Virus+ » program is an option exclusively designed and scientifically tested for Tesalys healthcare waste treatment systems STERIPLUS™ and STERISHRED®



INNOVATION
MADE IN
FRANCE

TESALYS « VIRUS + » PROGRAM

Tesalys
Making biomedical waste safe

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Double security against viruses

Questions & answers

In an outbreak situation, why is it important to treat the infectious waste on site ?

WHO technical brief dated March 3, 2020 clearly states : « **All health care waste produced during the care of COVID-19 patients** should be collected safely in designated containers and bags, treated, and then **safely disposed of or treated, or both, preferably on-site** »



UNIQUE
SHREDDING



135°C STEAM
STERILIZATION



8 LOG₁₀
REDUCTION

Are Tesalys systems effective to kill all kind of micro-organisms ?

Tesalys healthcare waste treatment systems **STERIPLUS™** and **STERISHRED®** are equipped as standard with a shredding-decontamination program with the following parameters (shredding, air extraction by vacuum through a 0,2 µm microbiological filter, steam autoclaving at 135°C ± 0,5°C during 10 minutes, under 3,145 ± 0,028 bar). This program has been tested according to the requirements of NFX 30-503-1 standard with optimum results on **vegetative bacteria, bacterial spores, fungi, viruses and parasites** (up to 8 log₁₀ reduction on bacterial spores).

What makes Coronavirus SARS-CoV2 (causing Covid-19) particularly dangerous ?

Coronavirus causing the Covid-19 disease is a **new emerging virus of small size**, which attacks primarily the respiratory airways. **Viral RNA is transmitted via respiratory droplets** but **airborne transmission** and **contaminated surfaces** are also being considered.



What is Tesalys' « Virus + » program ?

In response to the **Covid-19 outbreak**, Tesalys has developed a **special program named « Virus + »** in order to have a reinforced efficacy of the standard program which includes an extra **pre-decontamination stage after the shredding at a temperature of at least 85°C during 15 min.** to make sure all viruses are inactivated even before the standard decontamination cycle starts.

Is the « Virus + » program safer than a normal autoclaving cycle ?

In a normal autoclaving cycle, air is removed from the chamber either by gravity displacement or with a vacuum system before the sterilization phase. This air potentially contaminates the surrounding environment and puts the personnel at risk.

In the Tesalys **STERIPLUS™** and **STERISHRED®** standard program, air removed from the chamber during the pre-vacuum is effectively filtered by a 0,2 µm microbiological filter to avoid the release of pathogenic micro-organisms in the atmosphere.

The « Virus + » program provides an extra security : the pre-decontamination phase at 85°C ensures that viruses are completely eliminated in the sealed chamber of the Tesalys unit even before the 0,2 µm air filtration starts.

Using the « Virus + » program is like driving a car wearing your safety belt + an Airbag !



Is the « Virus + » program scientifically tested to eliminate Coronavirus alike viruses ?

Efficacy tests have been carried out by an independent laboratory using H1N1 ATCC VR1469 which has similar heat resistance properties to the Coronavirus causing SARS (SARS-CoV or SARS-CoV2, said Covid-19).

« Virus + » program equipping Tesalys HCW treatment systems inactivates Coronavirus-alike viruses during the pre-decontamination phase providing additional security for the user.

Epidemic risk management solutions



STERIPLUS™ RANGE
Integrated shredding
& steam sterilization systems
Capacity of up to 20 kg/h



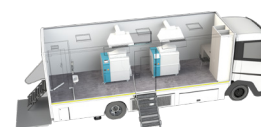
STERISHRED® RANGE
Integrated shredding
& steam sterilization systems
Capacity of up to 100kg/h



TESABOX
Cardboard containers
with internal plastic bag



CRIOGES for Tesalys
Storage cryogenisation/
photocatalysis units
for hazardous waste



TESATRUCK
(partnership
Toutenkamion)
Mobile healthcare waste
treatment units. Truck, semi-
trailer or container