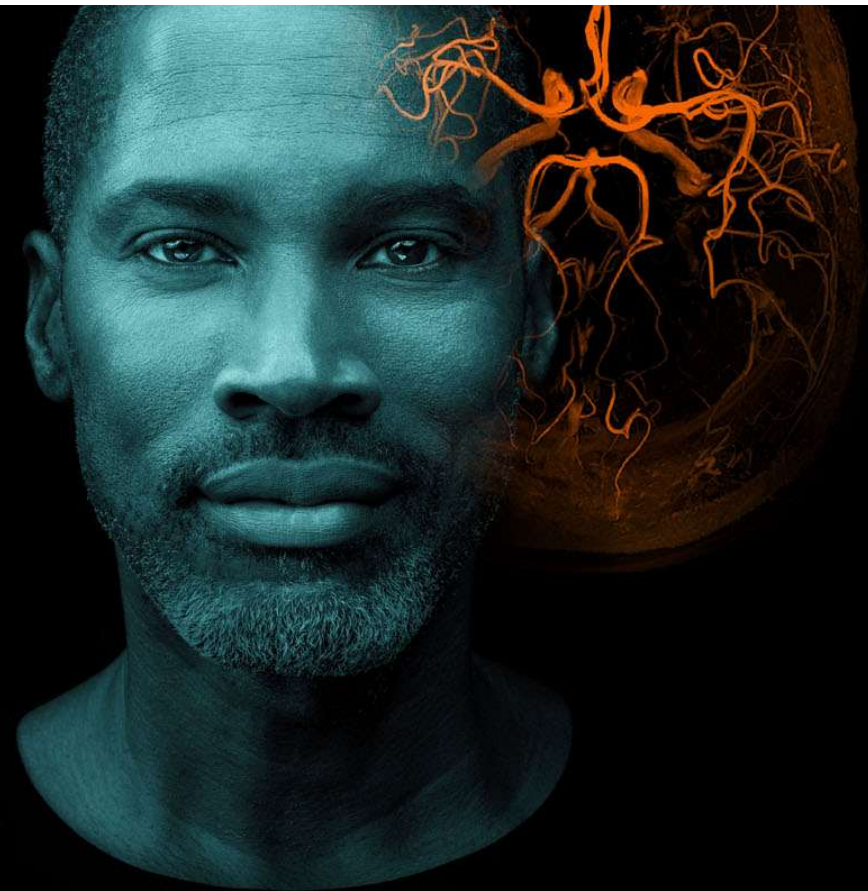
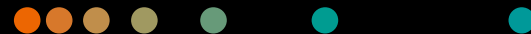


Preventing contaminated medical devices in the context of COVID-19

Recommendations

X-ray Products



X-ray Products Overview

According to the WHO COVID-19 information center:

“People can catch COVID-19 from others who have the virus. The disease can spread from person to person through small droplets from the nose or mouth which are spread when a person with COVID-19 coughs or exhales. These droplets land on objects and surfaces around the person. Other people then catch COVID-19 by touching these objects or surfaces, then touching their eyes, nose or mouth. People can also catch COVID-19 if they breathe in droplets from a person with COVID-19 who coughs out or exhales droplets.”¹

In this context, patients infected with COVID-19 which undergo exams in medical devices might transmit the disease via contamination of the systems surfaces and therefore **disinfecting the systems after each patient is recommended.**

¹ See Q&A on coronaviruses (COVID-19), <https://www.who.int/news-room/q-a-detail/q-a-coronaviruses>, 26th March 2020

X-ray Products Overview

Recommendations

- To date, the recommendations of the existing risk assessment apply. Generally used disinfectants have to be effective against the COVID-19 virus. Check list of disinfectants that meet EPA's criteria for use against SARS-CoV-2 and its label for specific instructions for inactivation and follow label instructions for product use (for countries that do not follow EPA recommendation, local environmental protection agencies recommendation apply).^{1,2}
- All parts of objects that could potentially come into contact with patients and medical staff have to be disinfected.
- All local hygiene instructions (hospital) must be followed. These should meet at least our recommendations.
- Please follow the proper cleaning instructions provided in the operator's manual.

Caution

Please note that some cleaning agents can cause damage to system components and accessories, a specific list of recommendation for different modalities can be found in the instruction for use of the medical device.

Do not pour cleaning fluid onto surfaces and do not spray fluids - always use a damp cloth for cleaning.

Please contact your local Siemens Healthineers organization for further details.

¹ See EPA / US, <https://www.epa.gov/pesticide-registration/list-n-disinfectants-use-against-sars-cov-2>, 26th March 2020

² See RKI / Germany, https://www.rki.de/DE/Content/InfAZ/N/Neuartiges_Coronavirus/Hygiene.html, 26th March 2020

Safety Instructions for Fluoroscopy & Urology Products

CAUTION

Use of harsh cleaning agents, liquids, or sprays.

Risk of electrical hazard or damage to the system

- **Use only substances for cleaning and disinfection, which are recommended**
- Do not let cleaning liquids seep into the openings of the system (for example air openings, gaps between covers).
- Observe the cleaning and disinfection instructions.

CAUTION

Inadequate cleaning and disinfection

Risk of infection

- Clean and disinfect all contaminated surfaces and all parts which may come (or have come) in contact with patient after each examination.
- **Use the recommended cleaning agents and disinfectants**
- Protect the portable detector with a single-use plastic bag

X-ray Products

Fluoroscopy & Urology

	antistatic cleaner	household cleaning agent, pH-neutral	rubbing alcohol	alcohol	aldehyde	quaternary compound	guanidine derivative	pyridine derivative	benzene	alkylamine	phenol derivative	organic acid	peroxid	AHP (accelerated hydrogen peroxid)	chlorine derivative
Fluoroscopy															
Luminos Agile Max		X			X		X					X	X		
Luminos dRF Max		X			X		X					X	X		
Luminos Fusion FD		X				X	X								
Urology															
Urooskop Omnia Max		X			X		X	X		X		X	X		

.....

Disinfecting

.....

1. Disinfect all the parts that can, directly or indirectly, come or have come into direct contact with the patient.
2. In addition, observe the hygiene plan of your hospital.
3. Disinfect the system by wiping only.

Fluoroscopy

Luminos Agile Max

Read carefully the according chapter in the operator manual of the Luminos Agile Max Operator manual - **chapter 2.3.8 Cleaning and disinfection**¹

The following active ingredient classes can be used:

- Guanidine derivatives
- Peroxide compounds
- Organic acids

The following products should not be used:

- Virex TB
- Terralin
- All alcohol-based products
- All phenol-based products
- All chlorine-releasing products

.....
The safety data sheets of the manufacturer provide detailed information on the composition of the disinfectants.
.....



Example products (permitted)

US: Listed on EPA²:

Peridox RTU / Contec
Peroxide

Germany: Listed on RKI³:

Dismozon / Bode Chemie
Peroxide

Incidin Plus / Ecolab
Glucoprotamin

¹ Luminos Agile Max Operator Manual – VF10 and higher // XPD1-325G.620.02.02.02

² See EPA / US, <https://www.epa.gov/pesticide-registration/list-n-disinfectants-use-against-sars-cov-2>, 26th March 2020

³ See RKI / Germany, https://www.rki.de/DE/Content/InfAZ/N/Neuartiges_Coronavirus/Hygiene.html, 26th March 2020

Fluoroscopy

Luminos dRF Max

Read carefully the according chapter in the operator manual of the Luminos dRF Max
Operator manual - **chapter 2.3.8 Cleaning and disinfection**¹

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Peroxide

Incidin Plus / Ecolab
Glucoprotamin

¹ Luminos dRF Max Operator Manual – VF10 and higher // XPD3-520G.620.03.01.02

² See EPA / US, <https://www.epa.gov/pesticide-registration/list-n-disinfectants-use-against-sars-cov-2>, 26th March 2020

³ See RKI / Germany, https://www.rki.de/DE/Content/InfAZ/N/Neuartiges_Coronavirus/Hygiene.html, 26th March 2020

Fluoroscopy

Luminos Fusion FD

Read carefully the according chapter in the operator manual of the Luminos Fusion FD
Operator manual - **chapter 6 Cleaning and disinfection**¹

The following active ingredient classes can be used:

- Guanidine derivatives
- Quaternary compounds

.....
The safety data sheets of the manufacturer provide detailed
information on the composition of the disinfectants.
.....



Example products (permitted)

US: Listed on EPA²:

Sani-Cloth AF3 / PDI
Quaternary compound

Germany: Listed on RKI³:

**No quaternary based products
listed at RKI**

Alternative:
Cleanisept / Dr. Schuhmacher
Quaternary compound

¹ Luminos Fusion Operator Manual – VF10 and higher // XPD3-380.620.07.03.02

² See EPA / US, <https://www.epa.gov/pesticide-registration/list-n-disinfectants-use-against-sars-cov-2>, 26th March 2020

³ See RKI / Germany, https://www.rki.de/DE/Content/InfAZ/N/Neuartiges_Coronavirus/Hygiene.html, 26th March 2020

Urology

Uroskop Omnia Max

Read carefully the according chapter in the operator manual of the Uroskop Omnia Max
Operator manual - **chapter 6.2 Cleaning, disinfection, sterilization**¹

The following active ingredient classes can be used:

- Aldehydes
- Peroxide compounds
- Alkylamines
- Pyridine derivatives
- Guanidine derivatives
- Organic acids

The following products should not be used:

- Quaternary compounds
- Chlorine derivatives
- All alcohol-based products
- Benzene

.....
The safety data sheets of the manufacturer provide detailed
information on the composition of the disinfectants.
.....

¹ Luminos dRF Max Operator Manual – VF10 and higher // XPD3-520G.620.03.01.02

² See EPA / US, <https://www.epa.gov/pesticide-registration/list-n-disinfectants-use-against-sars-cov-2>, 26th March 2020

³ See RKI / Germany, https://www.rki.de/DE/Content/InfAZ/N/Neuartiges_Coronavirus/Hygiene.html, 26th March 2020



Example products (permitted)

US: Listed on EPA²:

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Peroxide

Germany: Listed on RKI³:

Dismozon / Bode Chemie
Peroxide

Incidin Plus / Ecolab
Glucoprotamin

Contact

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