

- **Estimated time for the CORONA virus survival on material levels (at 20 degree Celsius):**
 - Steel: 3 to 28 days
 - Aluminum: up to 8 hours
 - Wood: up to 4 days
 - Paper: up to 5 days
 - Glass: up to 4 days
 - Plastic: up to 2 days
 - PVC: up to 5 days
 - Surgical gloves (latex): up to 8 hours
 - Gown: up to 2 days
 - Ceramic: up to 5 days
 - Teflon: up to 5 days

- **Sterilization against human CORONA virus:**
 - **Ethanol 70%: elimination more than 99.9% (10 minutes of contact)**
 - **benzalkonium chloride 0.05% (from the quaternary ammonium class): elimination more than 99.9% (in 10 minutes during contact contact)**
 - **Chlorohexidine Di-gluconate: No effect**
 - **Sodium Hypochlorite [density 0.21%]: elimination more than 99.99% in 30 second**
 - **Sodium Hypochlorite [density 0.01%]: elimination more than 99% in 10 minutes**
 - **Hydrogen peroxide 0.5%: elimination more than 99.99% in less than 1 minute**
 - **Formaldehyde 1%: elimination in 2 minutes**
 - **Glutaraldehyde 2/5%: elimination more than 99.99% in 5 minutes**
 - **Povidone-iodine 7/5%: more than 99.99% in 15 second**

- **Conclusion:**
 - **Human CORONA virus can stay active on materials for up to 9 days.**
 - **Sterilization of materials with Sodium Hypochlorite 0.1%, Ethanol 62 to 71% or hydrogen peroxide 0.5% can completely deactivate CORONA virus within 1 minute.**

**For economical purpose, low density and elimination of odour, utilization of hydrogen peroxide in sterilization of materials and equipment is very useful.

Signed by Dr. Mohamad Khazei , Iran