



SARS-CoV-2 can be killed by the UV-Kleen™ system in under 2.01 sec

At the time of this writing, there are 27 million reported SARS-CoV-2 (COVID-19) cases in the world, with a death rate of 4%. SARS-CoV-2, is structurally similar to any other coronaviruses such as SARS (Severe Acute Respiratory Syndrome), and MERS (Middle East Respiratory Syndrome), can be treated with a UV-C solution with up to 99.99% kill rate.

UV-Kleen™ proprietary UV + Ozone solutions generate powerful germicidal radiation that can kill Coronavirus in under 2sec. The following published table* shows the UV dosage needed to kill coronavirus up to a 90% kill rate.

Microbe	D90 Dose mJ/cm ²	Time (sec) to 90% kill at 3ft	Source
Coronavirus	0.66	0.49	Walker 2007a
Berne virus (Coronaviridae)	0.72	0.54	Weiss 1986
SARS-CoV-2 (Italy-INMI1)	1.23	0.91	Bianco 2020
Murine Coronavirus (MHV)	1.5	1.12	Hirano 1978
SARS Coronavirus (Frankfurt 1)	1.64	1.22	Eickmann 2020
Canine Coronavirus (CCV)	2.85	2.12	Saknimit 1988b
Murine Coronavirus (MHV)	2.85	2.12	Saknimit 1988b
SARS Coronavirus (CoV-P9)	4	2.97	Duan 2003c
SARS-CoV-2 (SARS-CoV-2/Hu/DP/Kng/19-027)	4.17	3.10	Inagaki 2020
Murine Coronavirus (MHV)	10.3	7.66	Liu 2003
SARS Coronavirus (Hanoi)	13.39	9.96	Kariwa 2004d
SARS Coronavirus (Urbani)	241	179.18	Darnell 2004
Average	23.7	17.62	
Average excluding outliers	4.7	3.49	
Average for SARS-CoV-2	2.7	2.01	

Based on published studies, it is found that 2.7 mJ/cm² is large enough to kill SARS-CoV-2 up to 90%, which is acquired in 2.01 sec using a UV-Kleen™ 300w UV system when placed at a distance of 3ft.

Citation: Kowalski, Wladyslaw & Walsh, Thomas & Petraitis, Vidmantas. (2020). 2020 COVID-19 Coronavirus Ultraviolet Susceptibility.