GENTAŞ
*a touch to life*

Krina®

**Viruses are microscopic organisms that exist almost everywhere on earth. They can infect man, animals, plants, fungi and even bacteria. Viruses vary in complexity and consist of genetic material (RNA or DNA) surrounded by a coat of protein, lipid or glycoprotein. Even though viruses are essential organisms for the human body, they are also bearing a threat to humans, a threat that was proven in history past pandemics and demonstrated in the current COVID-19 pandemic period. The COVID-19 pandemic has influenced almost all life aspects–social, economical, behavioral and political.**

Since the most common used method to sterilize surfaces is still the use of alcohol base, disinfectants and antiseptics, the use of UV irradiation as a mean to sterilize was widely investigated in the last 20 years and implemented in the last 5 years in several sectors.

**What is Germicidal UV, and what is UVGI?**
Germicidal UV (GUV) refers to using ultraviolet radiant energy to inactivate bacteria, mold spores, fungi or viruses. When the process is applied in a given location, it has generally been referred to as ultraviolet germicidal irradiation (UVGI).

**Is all ultraviolet considered germicidal ultraviolet (GUV)?**
Germicidal ultraviolet (GUV) – refers to short-wavelength ultraviolet “light” (radiant energy) that has been shown to kill bacteria and spores and to inactivate viruses. Wavelengths in the photo biological ultraviolet spectral band known as the “UV-C,” from 200 to 280 nanometers (nm), have been proven to be the most effective for disinfection.

**Can UV-C kill viruses as well as bacteria?**
UV-C kills living bacteria, but viruses are technically not living organisms; thus, we should correctly say “inactivate viruses.” Individual, energetic UV-C photons, photo chemically interact with the RNA and DNA molecules in a virus or bacterium to render these microbes non-infectious.

Decorative laminates, as one of the most common and leading surfacing materials, is exposed to the environment along with human contact during daily life use. As such common surfacing material, the influence of viruses and UVC irradiation on HPL surface properties had been widely investigated by GENTAŞ, incorporating advanced instrumental and analytical methods. Once investigated it was clear that UVC irradiation bare a significant influence on decorative laminates surface properties – both visually and technically.

In order to upgrade the surface resilience against UVC irradiation, GENTAŞ has developed KRINA - an upgraded surface that withstand UVC Irradiation for more the 1000 hours without any surface characteristic change - No visual change (discoloring / yellowing) or surface deformation ( micro cracks / blisters).

The enhanced surface properties against UVC irradiation, enable the use of KRINA as Surfacing material in public areas, private area and customized cabinets.