

Photopaque™

Visible Light Activation Type

MPT-623 (Powder)

STS-427 (Water dispersion)

Photopaque MPT-623 is a photocatalytic TiO₂ treated with platinum compound, developed by ISK's unique technology which shows high photoactivity under visible light.

STS-427 is a water dispersion of MPT-623.

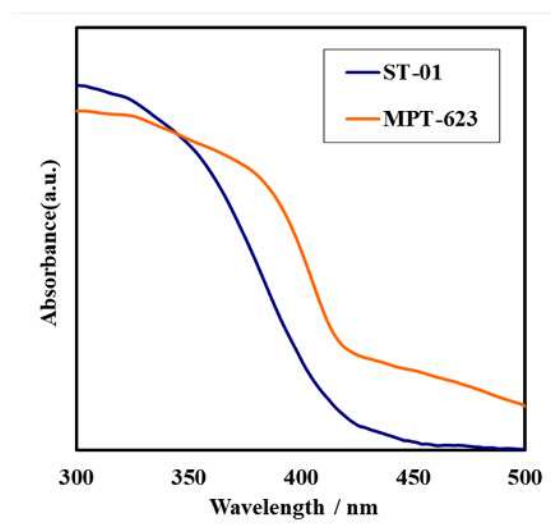
Under the indoor fluorescent lamps MPT-623 and STS-427 have a high activity of decomposing acetaldehyde, which causes odor, and also have a high antiviral activity.

★Basic Properties

	Visible light activation type	UV light activation type
	MPT-623	ST-01
X ray diameter (nm)	18	7
SSA (m ² /g)	around 60	around 300
Surface treatment	Pt compound	non

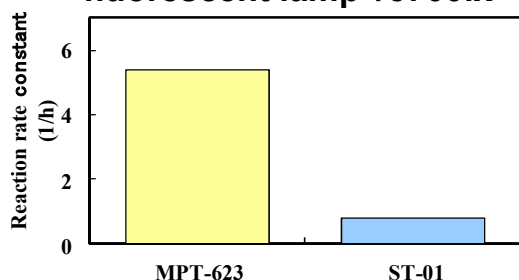
STS-427 (dispersion of MPT-623)	
Solid concentration (%)	18~22
pH	7.0~9.0
Mean particle size (μm)	0.05~0.10

★Photo-absorption characteristics



★Activity of decomposing acetaldehyde

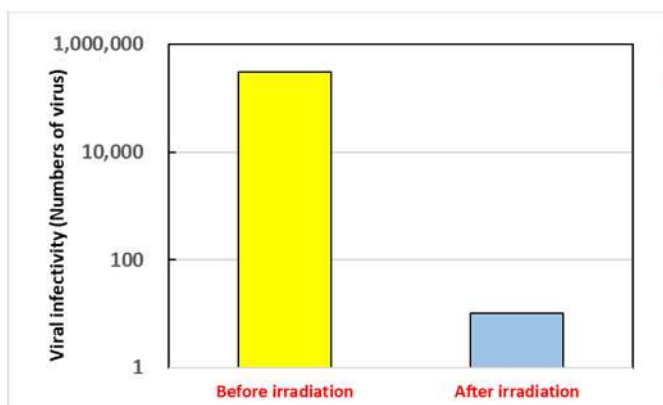
fluorescent lamp : 5700lx



【Method of measurement】

- Closed circulation reactor (Acetaldehyde Initial concentration :150ppm)
- Sample tested : 0.1g
- Exposed area : 28.3cm²
- Reactor volume : 2.8L
- Circulation rate : 3L/min

★Antiviral activity test ((bacteriophage Qβ)



• Virus is reduced under the visible light significantly.
• Meet the performance standards of Antiviral activity value of Photocatalysis Industry Association of Japan.

【Test method】

JIS R 1756

※Fluorescent lamp : 500lx, 4 hours
 Sharp cut filter Type B
 (Cutting below 380nm of UV)