MASONRY STAIN

Photocatalytic
Thermal Insulating

IN- Interior IN

FA - Exterior FA

Due to the content of titanium dioxide and ceramic microspheres filled with gas, increasing thermal resistance and reflecting IR radiation, the paints show two remarkable properties:

TITANIUM DIOXIDE under the influence of light (natural or artificial) in the presence of oxygen and water contained in the air, neutralizes viruses, pollutants, microorganisms, bacteria and allergens.

THERMAL INSULATION - thanks to the use of a composite of microspheres, the paint reflects heat radiation - it retains heat in winter and reduces heating of rooms in summer.

Benefits of Masonry Stain:

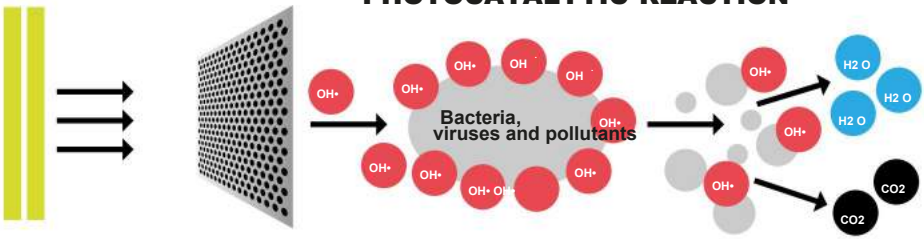
- **Neutralizes the flu virus**
- **Anti-smog, cleans the air**
- **insulates the building and is an additional insulating layer It**
- **Significantly reduces the growth of facades with algae and lichens**
- **Resistant to pressure washing**

UV PROTECTED
BREATHABLE

MINERAL STAINS

MINERAL STAINS

PHOTOCATALYTIC REACTION



The photocatalyst absorbs light radiation

Create strongly oxidizing radicals hydroxyl (OH)

Bacteria, viruses, dirt particles and unpleasant odors are destroyed

It is harmless water and carbon dioxide

Self-cleaning

The surfaces covered with paint are self-cleaning of dirt, mold, fungi and lichen.

As a result of its reaction with the paint, contaminants separate from the substrate and are washed away by rain.

Air purification

Contaminants (including exhaust gases, tobacco smoke, sulfur and nitrogen oxides) in the air are decomposed in contact with the paint.

Virus and bactericide

Photocatalytic paints cope with viruses (including all types of influenza viruses), bacteria and microorganisms as with any other pollutant or harmful compound.

Where sterility is required, it is a very important feature. Destroys viruses such as (SARS-CoV-2, BHV-1, influenza viruses):

- 60 minutes of irradiation of the Masonry Stain surface with an ordinary room fluorescent lamp from a distance of 2.6 m causes a 96.5% reduction in the number of virus particles, and after 24 hours the reduction of viruses was 99.999%.
- Using the UV-A lamp, after 60 minutes, 97.5% of viruses were reduced, after 24 hours of irradiation, 99.9995% of viruses were reduced (ie from the original 2,000,000 PFU / ml only 10 PFU / ml remained).

THERMAL INSULATION

Thermal barrier

The microspheres reflect more than 90% of the heat energy. As a result, the paint effectively insulates the walls of buildings: the room keeps warm on cold days, and does not heat up on hot days.

Thermal isolation

The presence of spheres in the paint causes the dry coating to form a heat-insulating layer. The heat transfer (conduction) through such a coating is much lower than that of ordinary paints.

To some extent, it acts as polystyrene insulation. The research shows that modification with microspheres increases the thermal insulation capacity.

Elimination of water condensation

The paint reduces the condensation of water vapor on its surface. In this way, we avoid surface degradation and heat loss.

Inhibition of the growth of fungi and mold

The paint works like polystyrene, maintaining a uniform temperature on the walls, which prevents the formation of thermal bridges, which most often create moisture, which is a substrate for fungi and mold.

Detailed reports on all tests are available at: www.mineralstains.com

VIRUSIDAL
PHOTOCATALYTIC - ANTI-SMOG
THERMAL INSULATION (MICROSPHERES)
FACADE STAIN
POTASSIUM SILICATE NANOTECHNOLOGY

Water glass-soluble silicate (stain) designed for the design of structural elements both indoors and outdoors. It can be applied to any breathable Masonry Surface that does not contain any sealers.

TITANIUM FA is a technologically advanced paint with photocatalytic, thermal insulating and thermos reflective bases. Thanks to the use of a composite of microspheres, the stain has very high thermal reflection property - absorbing heat in winter and limiting heating in summer. Two functions are combined in one paint: photocatalytic and thermos reflective (thermal insulating). Titanium FA, protects external walls against moisture. After drying, it has a hydrophobic effect, with very good adhesion to masonry substrates. Titanium FA achieves a high and breathable vapor permeability.

Titanium FA available colors come in a Pastel palette. (Darker colors) can be achieved, using our Traditional Potassium Silicate Stain.

The paint contains composites with photocatalytic and thermos reflective (thermal insulation) applications that combine large silicate microspheres with a photoactive catalyst. The product is effective in removing harmful urban and industrial gaseous substances such as: tobacco smoke, sulfur dioxide, carbon monoxide (carbon monoxide), nitrogen oxides, aldehyde vapors, alcohols (methanol, ethanol, and isopropanol), aromatic and aliphatic hydrocarbons (benzene, toluene). , ethylbenzene, xylene, kerosene, gasoline). As a result of the photocatalytic process resulting from the action of light and (contained in the air), it comes into contact with protected surfaces, causing oxidation of harmful effects that have caused a threat to health and the environment. The larger the surface covered with photocatalytic paint, the faster its use to remove it from the hazard. Due to the catalyst (contained in the paint), contaminant residues also cause discoloration on the wall surfaces, e.g. nicotine stains.

The composite present in the paint has the ability to barrier over 90% of the thermal energy from infrared (thermal, IR) radiation falling on it, reducing the heat transfer in warm months and saving heat in the winter. Laboratory tests show that the paint effectively insulates building walls that reflect thermal radiation. The key components are microspheres. Microspheres are particles with a spherical housing containing inert gases inside. This thermal insulation acts as a barrier in the summer and as a heat shield in the winter.

Conclusion: Our Titanium FA has the same properties as our Traditional Potassium Silicate Stain, with the addition of Microspheres (Thermal Insulation) and Photocatalytic Properties.